



DOCTOR OF BUSINESS (DBA)

Postgraduate study: influencing factors in prospective students' motivation to apply and decision to enrol

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Award date:
2019

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Publication date:
2019

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**Postgraduate study: influencing factors in prospective students' motivation to apply
and decision to enrol**

Gail Elizabeth Carter-Payne

A thesis submitted for the degree of Doctor of Business Administration

(Higher Education Management)

University of Bath

Department of Management

April, 2019

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Acknowledgements

This DBA was a tremendous experience.

I found the programme enriching in terms of scholarship, and want to thank Professor Rajani Naidoo, Professor Jurgen Enders and my main supervisor Dr Robin Shields of the University of Bath, for readily and generously sharing their intellect. I am grateful to my second supervisor, Professor Philippa Levy from the University of Adelaide, for her embracing manner, professional supervision, willingness to find ways to work with me across a 14-hour time difference, and her ability to keep me feeling confident as I inched toward my goal.

The DBA was also enriching in terms of collegiality, and I want to thank the entire DBA 13 cohort, in particular, Lesley, Elizabete and Jean-Guy, for their warm and wonderful friendship, which I will forever cherish.

I also want to thank my institution, the Cave Hill Campus of The University of the West Indies, Barbados. I truly appreciate the support they provided in terms of scarce resources from the Staff Development Fund, access to the data I needed, and the time to focus attention on my goal.

I dedicate this study to my husband Jesse, and my children, Christopher, Nicholas and Melanie, who supported me every step of the way.

I am happy to have reached the end of the work, sad to have reached the end of the experience, but eager to further develop the findings of the research to add value to the field.

Abstract

In the literature related to college choice, motivation occurs at the point of applying to higher education, and enrolment occurs at or near the end of the process. This study uses a critical realist approach and a quantitative research design to investigate the effect of the initial motivation to apply and demographic data on both the final enrolment decision of postgraduate applicants and the barriers to enrolment that applicants report as obstacles. The study uses the literature on motivation to create three broad categories of motivation: intrinsic; internally-driven extrinsic; and externally-driven extrinsic; and the literature on barriers to adult learning to underpin the creation of financial; external restraint; and dispositional barriers to enrolment. Data for the study came from an online longitudinal cohort survey of postgraduate applicants. The findings include a statistically significant relationship between externally-driven extrinsic motivation and financial barriers reported as obstacles for not enrolling. The findings also suggest correlations between age, the length of time since an applicant's last degree, as well as region of nationality and the final enrolment decision. The contribution to knowledge is the creation of a typology for relating motivation of postgraduate applicants and demographics to enrolment decisions, as well as an addition to the literature about postgraduate enrolment, motivation, and decision-making.

1. Introduction and Background

1.1 Introduction

Enrolment in higher education grew from 100 million to more than 207 million students between 2000 and 2014, leading to a worldwide higher education gross enrolment ratio of 34% in 2014 (UNESCO, 2017, p. 1). Even with gaps in the UNESCO data for some countries, postgraduate enrolments have risen in Australia, Canada, China, France, Germany, India, New Zealand and the UK, and remained constant in the US. In 2014 the total number of postgraduate students worldwide surpassed 27 million; however, at this level, there are a number of difficult issues with which researchers and institutions continue to grapple (UNESCO Institute of Statistics (UIS)). One such issue is the question of transition to enrolment, specifically why some postgraduate applicants do not enrol after formally accepting the offer of a place in a programme.

I found little research into the non-enrolment aspect of postgraduate decision-making, which could be attributable to a number of reasons. These reasons include challenges a researcher would experience identifying and reaching the relevant population from which to gather primary data, as well as the absence of easily available secondary postgraduate admission to enrolment data. From previous experience as a Registrar for postgraduate studies, I am aware that applicants encounter situations or barriers that affect their successful transition from admission to enrolment. While some of the situations may be unforeseeable or uncontrollable, from personal and professional experience, I know that there are other possible reasons; for example, a person may simply change his or her mind.

Reflecting on my own journey, I entered this doctoral programme because of the suggestion of a workplace mentor for whom I had great personal and professional respect. If circumstances around that situation had altered before the start of the programme, I may have gone as far as accepting the place, but I could easily have made the decision not to enrol at a point when it was too late to be convinced otherwise. Acknowledging that my motivation for applying did not come from within myself was

the genesis of my academic interest in this aspect of non-enrolment. As a contribution to the postgraduate enrolment management field of study, this piece of research aims to develop theoretical knowledge that provides an understanding of the postgraduate non-enrolment decision. In particular, my study investigates the possibility of a correlation between the motivation for submitting an application to a postgraduate programme and the decision of an applicant not to enrol after accepting a place.

1.1.1 The significance of postgraduate education

While an in-depth history of the development of postgraduate education is beyond the scope of this thesis, Donaldson and McNicholas (2004, p. 347) suggest that over time the broader higher education field has shifted from a perceived focus of producing teachers, researchers and scholars for the professions, to providing educated staff members for the industry. The workforce reflected this shift in an expansion of the number of job-seekers with a first degree, which is increasingly noted in the developed world as a standard entry-level requirement (Lindley and Machin, 2013). This expansion of qualified job-seekers fuelled growth in the number of students seeking higher qualifications, a situation observed by Stuart Blume as far back as 1986 (p. 219) and highlighted by Wakeling (2005, citing Wolf, 2002). Postgraduate education provides an obvious means of distinction from first-degree holders as well as a more advanced level of analytical and problem-solving skills (Donaldson and McNicholas, 2004). A 2010 report from the Council for Industry and Higher Education (CIHE), UK notes this postgraduate advantage, stating that businesses 'value postgraduates' and appreciate their 'high-level research and development skills' (p. 12). Students also express a belief in a postgraduate advantage. From a survey of 233 new postgraduate students at Kingston University, UK, Michelle Morgan (2013, p. 49) found that over 85% of the cohort believed that employers placed a higher value on that qualification.

The increase in the numbers of postgraduate students coupled with the advanced level of research and development skills has created workforces that are more highly educated, leading to more competitive economies (Donaldson and McNicholas, 2004,

p. 347). There have also been benefits on the private side with postgraduate students reporting financial benefits, greater analytical and soft skills, and improved career prospects (Barber et al., 2004). Universities credit research degree programmes with helping expand their research activity (Donaldson and McNicholas, 2004), with research students seen as 'major drivers for innovation and growth' and able to help inform the creation of public policy (Smith et al., 2010, p. 32). These are some of the reasons postgraduate education has become a significant part of the higher education sector.

1.1.2 The gap in research

In discussing the transition to postgraduate education in the UK, Wakeling et al. state that the 'growing consensus over the economic, social and cultural benefits of postgraduate study has not been matched by a detailed understanding of who progresses to postgraduate study, and why' (Wakeling, Hancock and Hampden-Thompson, 2015, p. 2). While that study is not specific to the non-enrolment aspect of transition, it does highlight a gap in research into some elements of the postgraduate journey. I found many studies that address the decision-making process for selecting potential institutions, for selecting a preferred institution, as well as studies within the population of people who had already made the postgraduate step, researching why they undertook the programme. However, the 'who' and 'why' data to investigate the decision-making of *potential* postgraduate students who did not enrol, remain unavailable.

In 2016, the Postgraduate Experience Study (PES) in the UK highlighted the difficulty of both determining the size of the non-enrolment population as well as collecting composite application to enrolment data. The PES report refers to data collection issues that affected the investigation of the incidence of postgraduate non-enrolees in the universities that participated in the study. In that study, the researchers define 'non-enrolees' to include people who did not enrol after acceptance, as well as potential applicants who did not apply at all. The researchers comment on the varying

ways in which institutions maintain their data, the varying departments with responsibilities for postgraduate admission, and the lack of comprehensive customer relationship management software all leading to an inability to provide an 'accurate understanding of motivations and drivers' among the population (Morgan and Direito, 2016, p. 23).

Data collection and analysis are better in the US with some information available on the size of the non-enrollee population. Information from a national survey undertaken by the US Council of Graduate Schools (Okahana, Feaster and Allum, 2016) that received data from 617 colleges and universities in the US revealed that, in 2015, institutions made offers of admission to the approximately 40.3% postgraduate applicants who were qualified and suitable for the programme to which they applied (Table B.2). Of these admitted candidates, approximately 58% enrolled as expected (Table B.3) with 42% unaccounted for. While I cannot assume that these percentages are representative, and acknowledge that they would be different from country to country, institution to institution, and programme to programme, the statistic provides evidence of a sizeable population of admitted applicants who do not enrol, and a rationale for this investigation.

1.1.3 Research question

Universities and colleges routinely conduct surveys to gather data from newly-enrolled students about their application experience. These data provide information about the challenges, pitfalls, high points, and areas for administrative improvement. However, institutions only become aware of non-enrollees (also called 'no-shows') *after* the class registration period has ended. Unless individual 'no-show' applicants have a peculiar level of interest in providing voluntary information to an institution which they have effectively rejected, they may ignore a request for a reason for non-enrolment. In instances where 'no-shows' might be willing to retrospectively provide reasons for non-enrolment, Bernard et al. (1984) warn that reasons informants provide after-the-fact are subject to memory distortion and selective recall. Chapman (1986) adds other

possible inaccuracies, including moderation of the real reasons for a decision, rationalizations or other types of unreliable response.

Notwithstanding the potential for incomplete or misleading information, a qualitative study of six candidates who did not enrol generated useful academic and administrative insight (Hudnett, 2015). Hudnett's research, which he slanted to institutional questions, was able to reveal reasons for non-enrolling related to the inadequacy of communication from the institution, unpleasant or impersonal application experiences, the lack of understanding of the financial aid process, and the general lack of timeliness and efficiency of the process. However, I found no study that tried to investigate if the reason for eventual non-enrolment was in any way related to the motivation that caused a candidate to apply, an activity which could have taken place up to a year before the enrolment decision. As this topic did not appear in the little research I found related to non-enrolment, I decided to include the area of demographics in my research. This study seeks to explore the research question and related sub-questions following.

Research Question:

What is the relationship between students' motivation to apply to postgraduate study, their demographic profile, and their decision to enrol in a postgraduate programme after receiving an offer of admission?

Sub-questions:

- 1. What is the motivation of postgraduate applicants who accept places offered?*
- 2. What is the motivation of postgraduate applicants who do not proceed to enrol after receiving an offer of admission?*
- 3. Is there a difference in motivation or demographic profile between applicants who formally reject an offer of admission, and those who informally reject an offer of admission by becoming no-shows?*

My approach to this study was to gather data on demographics and motivation from eligible candidates at the point of each offer of admission rather than *en masse* after the enrolment and registration period had ended. This approach to collecting data on an ongoing basis provided the opportunity to establish a connection with applicants at a time when they were actively engaging with the institution, in the hope that applicants would be more amenable and willing to provide information. The timing of the approach enabled me to capture motivations when these would still have been driving the decision-making of applicants. Because I was conducting the research in a small island developing state¹, there was an opportunity to seek out influential factors peculiar to such an environment.

1.2 Methodological approach

The study adopted a rigorous approach to social science research based on a critical realist philosophical framework. I limited the research to all applicants who gained admission into any postgraduate diploma (including the postgraduate diploma in education), master or doctoral degree programme at the Cave Hill Campus of The University of the West Indies in Semester 1 of the academic year 2018-2019 (n=560). I gathered motivators from literature existing in the related fields, and, in the survey, provided respondents with the opportunity to record additional motivation items. Similarly, from the literature, I gathered existing barriers to enrolment for the survey and provided respondents with the opportunity to record other barriers that influenced their decision.

In January and February 2018, I created and tested the survey, and revised the format and wording based on feedback from the testers. In March 2018, I submitted the final version of the survey to the necessary Institutional Review Boards for approval. After approval of the instrument in early April and every week until mid-September 2018, I

¹ First formally recognized at the UN Conference on Environment and Development in Rio de Janeiro in 1992, the Small Island Developing States are a distinct group of vulnerable states with the characteristics 'low-lying coastal countries that tend to share similar sustainable development challenges, including limited resources, remoteness, susceptibility to natural disasters, vulnerability to external shocks, excessive dependence on international trade, fragile environments and small populations'.

downloaded admissions data from the postgraduate student information system and sent the questionnaire to each newly-admitted applicant. Therefore, my contact with applicants often happened *before* the candidate had either accepted the offer or rejected the institution. Consequently, the final dataset included data from respondents who accepted offers and ultimately enrolled, some who accepted the offer, but who did not enrol, and some who rejected the offer outright.

As part of the initial contact with respondents, I asked them for permission to engage in follow-up contact depending on their eventual enrolment decision. From my weekly download of admission data, I identified respondents who had rejected the offer and sent them a second short survey asking for factors that influenced that decision. After the close of registration in September, I contacted all remaining respondents who had not enrolled with the same follow-up survey similarly asking them about factors that influenced their decision. At that same time in September, I contacted all candidates who had not formally responded to the original survey email, but who had not opted out, with a final request for participation.

This level of access to postgraduate applicants was possible because I am a Registrar of the institution in question where there is a definite desire to understand the thinking and decision-making of postgraduate applicants. I requested and gained the permission of the Cave Hill Campus Registrar to contact applicants during the application process and to access admission data. Because of my detailed knowledge of the admissions data, at the close of the enrolment period, I could identify the applicants who did enrol, the applicants who did not enrol, and cross-reference the final enrolment status to the motivation originally expressed. I had the expertise to clean the data and to analyse them using exploratory factor analysis and regression models, to group motivations into themes and map these themes to various enrolment decisions. Similarly, I grouped and analysed the factors for rejecting the offer as a second set of independent variables. As part of the process, I also collected age, gender and other demographic and programme data from the respondents and analysed these data according to motivation themes and enrolment decisions.

The selection of population, approach, the timing of the initial contact, the structured and targeted follow-up, my intimate knowledge of and access to admissions data, as well as the careful consistency I exercised in working with the data, provide evidence of the rigour with which I carried out this study.

1.3 Contribution

In 2012 the Higher Education Commission in the UK lamented that for too long postgraduate education has been '*a forgotten part of the sector*' (Higher Education Commission, 2012, p. 17). The Commission also referred to the lack of attention paid in the UK to reducing barriers to entry to postgraduate programmes (p. 12). My research pays attention to the postgraduate education sector through the investigation of motivations that are more likely to result in a successful applicant making the decision to enrol in a postgraduate degree programme after admission, and through the investigation of barriers that influence enrolment decisions.

Researchers around the globe have tracked and dissected parts of the road travelled by higher education. Among the many areas that have attracted attention are: the growth in number and type of higher education institutions and students (Trow, 2005), internationalisation (Knight, 2004), higher education governance studies and transformation of the higher education organisation (Enders, 2004; De Boer, Enders and Leisyte, 2007), the value of a degree (Tomlinson, 2008), changes in the profiles of higher education students (Altbach, Reisberg and Rumbley, 2009), changes in higher education funding models as governments worldwide have sought to contain the spend on education (Barr, 2004; Marcucci and Johnstone, 2007), and the impact of tuition fees (Pennell and West, 2005; Wilkins, Shams and Huisman, 2013). On-going debates include whether higher education provides public or private benefits (Marginson, 2007), the existence of a premium related to postgraduate education (Lindley and Machin, 2013), the effect of globalization (Naidoo, 2007), the rise of institutional rankings (Marginson and Van der Wende, 2007), and marketization of the higher education product (Naidoo and Jamieson, 2005). Notwithstanding the

significance of challenges raised in any of these debates, UNESCO has highlighted higher education as critical and a 'cornerstone for sustainable development' (UNESCO, 2017).

In the context of a small island developing state such as Barbados, the home of the Cave Hill Campus of The University of the West Indies, governments consider higher education as critical for development, providing a space to cultivate the research capacity that would find solutions to national problems (Crossley, Bray and Packer, 2009). The government of the island of Barbados manifested this belief by providing generous financial support for higher education as the norm. However, in 2013, changes in the economic landscape of the island forced the government to rethink the level of state financial support to all of the education sectors, resulting in a substantial reduction of funding for higher education. The change in higher education funding reflected the state's revised opinion that students should finance some part of this level of study, a position that is not uncommon in other parts of the world (Barr, 2004; Armbruster, 2008). This amended approach to financing fuelled a public cost but private benefit debate and ultimately created a conundrum for the Cave Hill Campus because a significant number of prospective students simply declined to enrol while some existing students withdrew from their studies.

The postgraduate section of the Cave Hill Campus uses two different funding models. The state provides financial support for a few programmes, but the majority of programmes operate on a self-financing basis where the student has full responsibility for fees. Following the change of tuition fee policy, the campus expected a decline in enrolment in state-funded programmes, but it received an unpleasant surprise in the increased number of people admitted to self-financing programmes who did not enrol as expected. As a result, the campus not only experienced a fall in income from the reduction in undergraduate and postgraduate enrolment but had to deal with wasted expenditure on academic and administrative preparation for admitted students who did not show up to enrol. By addressing a part of the non-enrolment problem, my research adds to the literature on enrolment management, motivation, and barriers to

enrolment. The findings should also be of broader significance to the postgraduate sector as evidence to support a review of enrolment strategies.

1.4 Organization of thesis

This chapter continues by providing the local and institutional contexts surrounding the development of higher education in Barbados, an overview of how the island's various tuition fee policies have changed over time, and the effect of these policies on postgraduate education at the Cave Hill Campus. Chapter 1 concludes by presenting how enrolment management systems have evolved followed by the basis for this research. While the research question is specific to postgraduate degrees, some of the literature reviewed has a clear undergraduate focus. The undergraduate literature and studies were not side-lined because, although undergraduate and postgraduate motivators and barriers to enrolment might differ somewhat, the decision-making processes at both levels revealed stages that are common, and the comparison provided guidance for construction of the framework for the research. Thus, Chapter 2 provides a review of literature related to the decision-making process around both undergraduate and postgraduate education, starting with literature related to theories of motivation, and ending with literature that investigates the barriers that block the conversion of application motivation to action. The research question and three sub-questions complete that chapter.

Chapter 3 explains the philosophical framework for the study along with the detailed methodology and selection of research methods for the abductive approach that I used. In an abductive approach, the researcher starts with an observation or set of observations, then works back to find the simplest and most likely explanation that accounts for the observation(s) (Fann, 1970, p. 55). In this case, my observation was that of no-shows after admittance, and I collected data to formulate the most likely explanation. Chapter 3 describes how, when and what data I collected, and the considerations of ethics, reliability and validity. In Chapter 4, I present descriptive statistics followed by the results of the exploratory factor and regression analyses

related to motivation to apply, demographics and non-enrolment. The thesis concludes with a review of findings in relation to the literature discussed in Chapter 2, a discussion of the implications of the study, and suggestions for areas for further research.

Definitions

The terms used throughout this document are as follows:

College, university and higher education institution: used interchangeably and treated as equivalent, with the one common denominator that they all provide at least undergraduate degrees.

Postgraduate education: refers to all levels of qualification above undergraduate degrees, including postgraduate diplomas, taught master degrees, master degrees by research, professional doctorates, and doctorates by research. A postgraduate diploma or master degree takes one to two years to complete, while the various doctoral programmes would normally take a minimum of four years to complete. In the US and Canada, this level of study is more typically called *graduate* education rather than *postgraduate* education.

Acceptance: refers to a candidate formally accepting a place offered by an institution, whether or not the candidate eventually enrolls in that institution.

Enrolment: goes beyond formal acceptance of an offer from an institution and refers to the actual process of registering as a student in a programme at that institution.

Non Enrolment: includes non-acceptance or refusal of a place offered by an institution, as well as acceptance of a place but not showing up to enrol as expected.

No-Show: refers to a candidate who accepted a place offered by an institution, but who did not show up to enrol as expected.

1.5 Background

1.5.1 The national context

1.5.1.1 The development of higher education in Barbados

Originally, an Amerindian settlement dating back to between 350 and 650 AD, the Caribbean island of Barbados became home to the Arawaks around 800 AD, and later the Caribs from South America in the mid-1300s. After a brief period of Spanish and then Portuguese interest in the 1500s, in 1627, the British claimed the island of 166 square miles as a colony, as they did with many other islands in the Caribbean. With the introduction of sugar cane and labour from a substantial slave trade, Barbados (known as 'Little England') developed into one of the biggest sugar industries in the world and, between 1660 and 1713, the island generated more trade annually than all the other North American colonies combined (Dunn, 1969, p. 4). With prosperity creating an increasing number of privileged families, it became the practise for newly-wealthy Barbadian parents to follow the tradition of the British settlers, and send their children to England for higher education (Braithwaite, 1958, p. 2).

The abolition of slavery in 1807, followed by the end of the slave trade in 1834, changed the social and political dynamics of the island leading to independence from Britain in 1966. In anticipation of independence throughout the region, and mindful of the need to equip citizens to manage the affairs of their respective islands (without sending people abroad for higher education), Britain established a college in the Northern Caribbean (Braithwaite, 1965, p. 79). Under a special relationship with the University of London, this new University College of the West Indies (UCWI) started on the island of Jamaica in 1948. By issuance of a Royal Charter in 1962, the UCWI gained full status as The University of the West Indies (UWI). In 1963, The UWI established a College of Arts and Sciences in Barbados in the Southern Caribbean, and in 1970, upgraded this branch of UWI to a full Campus with a complete higher education programme.

The Government of Barbados embraced the critical role of education in national development, and in 1970, UNESCO recorded the adult literacy rate on the island at 99%.² Proctor (1980, p. 195) summarized the effect of this high literacy rate as having given Barbados 'a head start among the developing nations of the world'. The Barbados Education Act of 1981 solidified the importance of education, making attendance at school compulsory for all children from ages five-plus to sixteen-plus. Further to this, until 2013 the Barbados Government underwrote the cost of tertiary education up to a first undergraduate degree for all suitably-qualified school-leavers. The provision of 'free' higher education extended to eligible nationals undertaking a select group of postgraduate programmes³ identified as critical for nation-building. This made Barbados unique in the Caribbean as the only island offering this level of support for higher education to its nationals.

The provision of free higher education not subject to class, race, status, gender or other discrimination of any kind (as detailed in UWI, 2013) gave the people of Barbados the encouragement and opportunity to participate in education to the highest level. Statistics for 2007-2016 (UNESCO Institute for Statistics (UIS)) in Table 1 show the Gross Enrolment Ratio, Tertiary (GER) of Barbados (last reported in 2011) to be nearly double the average for small island developing states, and on par with many larger developed states. Morgan (2014, p. 1151) cautions that measures used to record postgraduate participation are not consistent across countries, so statistics are unlikely to be totally accurate or comparable. Nevertheless, through their Institute of Statistics, UNESCO reports on data gathered (or estimated)⁴ from all types of institutions worldwide that provide organized education programmes. The UIS calculates the tertiary GER of a country as the number of students enrolled in tertiary education, regardless of age, as

² Data extracted on 17 August, 2017 from UNESCO Institute for Statistics (UIS)

³ State-funded programmes included most research degrees, Master of Arts & Master of Education degree programmes and three Master of Science programmes.

⁴ According to the UIS methodology on the data collection and review process as seen on 20 March 2019 at <http://uis.unesco.org/sites/default/files/documents/education-statistics-faq-en.pdf>

a percentage of the 5-year age group starting from official secondary school graduation age.⁵

Table 1 Gross enrolment ratio, tertiary, both sexes (%) of selected states⁶

Country	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Caribbean										
Antigua & Barbuda	n/a	n/a	13.44	14.90	13.34	21.99	n/a	n/a	n/a	n/a
Barbados	59.75	n/a	75.72	69.81	65.43	n/a	n/a	n/a	n/a	n/a
Guyana	11.77	11.37	10.94	11.75	11.69	11.53	n/a	n/a	n/a	n/a
Jamaica	n/a	23.54	23.41	26.82	26.18	28.71	27.12	n/a	26.88	n/a
Small Island Developing States	35.04	38.10	38.43	36.31	34.24	32.07	30.40	29.36	28.57	28.26
Non-Caribbean										
China	20.46	20.67	22.40	24.05	25.29	28.04	31.45	41.28	45.35	48.44
France	52.95	52.48	52.77	54.888	55.63	57.91	59.85	61.77	62.77	64.44
Germany	n/a	n/a	n/a	n/a	n/a	n/a	60.46	64.18	66.28	68.33
Switzerland	47.09	48.67	49.97	52.75	54.29	55.34	56.07	57.03	57.52	57.87
UK	58.60	56.80	58.11	59.18	59.44	59.84	57.61	57.27	57.29	59.41

1.5.1.2 Tuition fee policies and postgraduate education in Barbados

Therefore, from the establishment of a higher education institution on the island in 1963, and until 2013, Barbadians enjoyed a policy of state-funded tertiary education, including a first undergraduate degree and, in some cases, a postgraduate degree. In 2003, Barbadians began to participate in a new educational goal, articulated in that year's Throne Speech as a way of transforming the island to a 'fully developed society' (Moore, 2006, p. 27). Termed 'One Graduate per Household', this goal encouraged tertiary level institutions to find ways to broaden access to higher education so that at least one person in each household, regardless of social or financial status, once eligible to matriculate, had the opportunity to attend a tertiary institution. This new goal encouraged nationals who entered the workforce directly after secondary school, as well as others who had previously started but abandoned tertiary studies, to return to

⁵ Information retrieved on 20 March, 2019 from <http://uis.unesco.org/en/glossary>

⁶ Data extracted on 20 March, 2019 from UNESCO Institute for Statistics (UIS)

the classroom. The belief in higher education as critical for the development of the island's human resources continued up to the Human Resource Development Strategy 2011-2016 of the Government of Barbados (GOB, 2010) which identified higher education as essential for sustainable growth.

Barbados was no different to the other small islands in the Caribbean with economies based on service, in the way it was adversely affected by the Great Recession⁷ of 2008 (Mohammed and Gibbs, 2012, pp. 25-26; Mercer-Blackman and Melgarejo, 2013). Still, until 2013, the island's Government maintained the same format of financial support for higher education, so the downturn in the economy did not seriously affect student enrolment at the Cave Hill Campus. This changed in 2013 as, with no recovery of the region yet in sight, the Government of Barbados reported the pressure of state-funded education as being too great, and announced a new tuition fee policy (GOB 2013)⁸. Through the 2013 tuition policy, Government reduced funding for undergraduate studies with students required to finance 20% of their fees, and it completely ceased⁹ support for postgraduate programmes.

1.5.2 The institutional context

1.5.2.1 The University of the West Indies

The UWI comprises four campuses – the Cave Hill Campus in Barbados, the St. Augustine Campus in Trinidad & Tobago, the Mona Campus in Jamaica, and the Open Campus which provides online learning throughout the region, supported by offices in many of the Commonwealth Caribbean countries. The UWI offers undergraduate and postgraduate degree programmes to qualified local, regional and international students. The work of the four campuses is coordinated through a University Centre located in Jamaica, which focuses on strategic planning, managing relations with

⁷ The 'Great Recession' refers to the period of general economic decline observed in world markets during the late 2000s and early 2010s.

⁸ Appendix I is an extract of the relevant section of 2013 Budget Speech.

⁹ In May 2018, subsequent to a general election and a change in the Government of Barbados, the new Prime Minister announced a reversal of the 2013 tuition fee policy and a reinstatement of state-funding for higher education. The effective date of the 2018 tuition fee policy is the academic year 2018-2019.

governments, generating funding, developing the region and maintaining the University's international reputation. While each campus has an individual operational structure, the governance model includes cross-campus boards for Undergraduate Studies, and Graduate Studies & Research. These two boards meet regularly to make decisions on the direction of undergraduate and postgraduate education respectively.

In comparison to other higher education systems worldwide, UWI is something of a hybrid. On establishment, UWI followed the UK financing model, but diverging from the UK as that country moved away from the UGC¹⁰ funding structure. There is no common undergraduate application system among higher education institutions in Barbados like UCAS (Universities and Colleges Admissions Service) in the UK. There is no common higher education entrance examination like the US SAT (Scholastic Assessment Test), GRE (Graduate Record Examinations) or GMAT (Graduate Management Admission Test), and apart from certain professional programmes, UWI is generally non-selective once an applicant meets the matriculation requirement. Regarding its grading system, UWI again is a hybrid using both the nomenclature of first, upper-second, and lower-second class honours adopted from the UK, but also providing students with a US-type GPA. The UWI functions on a two-semester system accepting applications for undergraduate programmes for an August start, and twice a year for postgraduate programmes - for an August start and again for a start in January.

1.5.2.2 The Cave Hill Campus

The Cave Hill Campus has five¹¹ academic faculties - Humanities & Education, Law, Medical Sciences, Science & Technology and Social Sciences, and an inter-disciplinary Institute of Gender and Development Studies which all admit postgraduate students. In 2016-2017, enrolment at Cave Hill represented 11.6% of the total UWI student

¹⁰ The UGC was a committee of the British Government advising on the distribution of grant funding amongst the British universities. The intent of the UGC was to respect institutional autonomy while securing accountability of public funds (Shattock, 1994). In the UK, the UGC has since been replaced by the higher education funding councils.

¹¹ In 2018 the UWI approved the establishment of a Faculty of Sport with effect from academic year 2018-2019.

population with 5,507 undergraduate and postgraduate students. Tables 2 & 3 show the enrolment for the Cave Hill Campus for the years 2008-2009 to 2016-2017 as reported to the Cave Hill Campus Council. Table 4 shows the overall UWI enrolment in 2016-2017 along with some country data that gives perspective to the relative size of enrolment.

Table 2 Cave Hill Campus enrolment 2008-2009 to 2016-2017¹²

Cave Hill Campus enrolment	Total Undergraduate Students	Total Postgraduate Students	Total Students	Postgraduate Students as % of Total
2008-2009	6,831	950	7,781	12%
2009-2010	7,338	1,004	8,342	12%
2010-2011	7,582	1,092	8,674	13%
2011-2012	7,732	1,109	8,841	13%
2012-2013	7,529	1,247	8,776	14%
2013-2014	7,388	1,246	8,634	14%
2014-2015	5,825	1,038	6,863	15%
2015-2016	5,141	924	6,065	15%
2016-2017	4,714	793	5,507	14%

Table 3 Cave Hill Campus new students enrolled 2008-2016¹³

Cave Hill Campus Admissions	Total New Undergraduate Students enrolled	Percentage change in New Undergraduate Enrolments to previous year	Total New Postgraduate Students enrolled	Percentage change in New Postgraduate Enrolments to previous year
2008-2009	1,705	-10%	378	31%
2009-2010	1,839	8%	403	7%
2010-2011	1,740	-5%	383	-5%
2011-2012	1,693	-3%	387	1%
2012-2013	1,661	-2%	398	3%
2013-2014	1,465	-12%	359	-10%
2014-2015	1,038	-29%	261	-27%
2015-2016	925	-11%	232	-11%
2016-2017	1,019	10%	217	-6%

¹² Data from Cave Hill Campus Statistical Reports as accessed from <http://www.cavehill.uwi.edu/About/reports.aspx> on April 29, 2018.

¹³ Data from Cave Hill Campus Statistical Reports as accessed from <http://www.cavehill.uwi.edu/About/reports.aspx> on April 29, 2018.

Table 4 UWI student enrolment breakdown for 2016-2017¹⁴ and relevant country data

Campus, Country	Total Number of Students ¹⁵	% of Total enrolment	Population of country in 2017	Physical Size of Country (km ²)
Cave Hill, Barbados	5,507	11.6%	286,000	430
Mona, Jamaica	17,226	36.3%	2,890,000	10,990
Open	6,702	14.1%	n/a	n/a
St. Augustine, Trinidad & Tobago	18,116	38.1%	1,369,000	5,130
Total	47,591	100.0		

1.5.2.3 The effect of the policies on postgraduate education

As stated earlier, after the announcement of the new tuition fee policy, the decline in enrolment in state-funded programmes at the institution beginning in 2013 was not a surprise. First, a very public debate questioning the cost of the public financing of a university consumed the island for months after announcement of the policy in 2013 (Best, 2013; Dottin, 2013a, b; Wickham, 2014). The discourse, which was acrimonious in nature (Simpson, 2013; Singh, 2013), created much discussion within the local population around the value of higher education to both the individual and to the nation. In addition, without government financial support and in an uncertain economy, some of the Barbadian students willing to enrol may not have had adequate disposable income, ready access to savings, or the confidence to create debt for this purpose. Finally, one would expect that there would have to be a change of attitude and acceptance with the implementation of higher education tuition fees, which could take some time to normalise.

Also mentioned before, the Cave Hill campus experienced an unexpected decline in enrolment in postgraduate programmes for which the state had *not* traditionally provided funding. After announcement of the new policy in August 2013, there was a

¹⁴ Country data extracted from UIS Stat on 20 March, 2019. The UWI Open Campus is a virtual campus providing online education throughout the region; therefore, country size and population are not included in the table.

¹⁵ Excludes enrolment in institutions associated with the UWI, for example teacher training colleges in the other Caribbean Islands.

surprising drop of 13% in total enrolment of new students in postgraduate self-financing programmes. In 2014, the first effective year of the policy, the decline in new self-financing programme enrolment had reached 54% (Table 5 and Figure 1). The number of new enrolments in self-financing postgraduate programmes increased marginally in 2015, but the total was well below expectations and dipped again the following year. Without doubt, such an unforeseen decline in new enrolments in self-financing programmes would have contributed to what the then Principal of Cave Hill Campus, Sir Hilary Beckles, termed a ‘catastrophe’ in a televised interview (Thompson, 2014).

Table 5 New students in postgraduate (PG) programmes 2013-2016¹⁶

Year	Total number of New students enrolled in state-funded PG programmes	Percentage change to previous year of New students enrolled in state-funded PG programmes	Total number of New students enrolled in self-financing PG programmes	Percentage change to previous year of New students enrolled in self-financing PG programmes
2013-2014	133	-11.28%	242	-12.81%
2014-2015	114	-16.67%	157	-54.14%
2015-2016	66	-72.73%	175	10.29%
2016-2017	71	7.58%	146	-16.57%

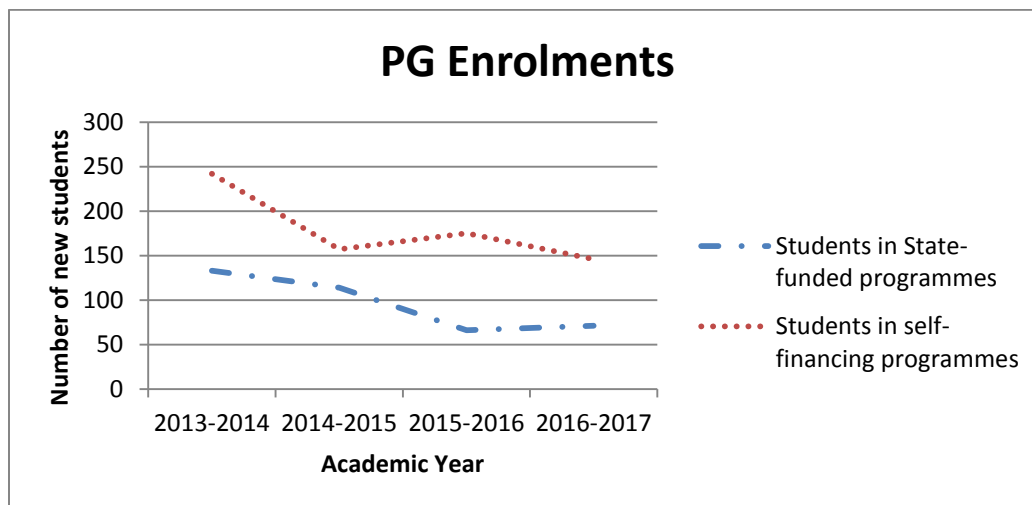


Figure 1 New students in postgraduate (PG) programmes 2013-2016

¹⁶ Data from Reports to Cave Hill Campus Council as accessed from <http://www.cavehill.uwi.edu/About/reports.aspx> on April 29, 2017. Numbers are marginally different to those in Table 3 due to inclusion of non-degree students in statistical tables used to create Table 5.

1.6 Enrolment management

The concept and field of 'enrolment management', mentioned briefly here, have both changed over the years as the higher education landscape has evolved (Dolence, 1993). The original idea of managing enrolment emanated from the need to find a way for higher education institutions to cope with the number of prospective undergraduate students they faced, during what Martin Trow termed the 'massification' of higher education in the post-World War II period (Trow, 2005). During this period, there was an expansion of numbers with widened access brought about by societal change, which made higher education attractive and available to a broader public. In these early days, the purpose of enrolment management was to process the increasing numbers of applications to colleges and universities more efficiently.

Over time, growth in the number of institutions and available college places followed the increases in student numbers, leading to students faced with increasingly complex choices about which institution to select. This expansion of choice resulted in competition between institutions, causing institutions to look further afield and to widen access to include non-traditional (female and minority) students in order to maintain student numbers. The National Audit Office, UK, provides a chronological detail of the efforts taken in that country between 1996 and 2001 to widen access and participation (NAO, 2002, Appendix 2). The effort to widen access led to the adoption of more strategic approaches as institutions sought to recruit what they perceived as the 'best' applicants, and to meet enrolment targets through using tools such as market segmentation. Another outcome of the expansion of choice was an increase in the number of applications submitted by an individual prospective undergraduate student. Because applicants were more aware of and could meet the entrance criteria at many colleges, they could all technically submit multiple applications and potentially receive multiple offers of admission. Predicting which students offered entry by an institution would choose to enrol increased the complexity of the issue for the enrolment management teams requiring a more strategic approach (Duniway, 2012; Hossler and Bontrager, 2014).

Some of these enrolment management issues are relevant at the postgraduate level, except perhaps for the submission of applications to multiple institutions. From first-hand knowledge of the industry, the administration of postgraduate programmes is most often distributed rather than centralised, with institutions, departments and even programmes using different application forms and requiring submission of various pieces of supporting documentation. An increasing variety of specialised postgraduate programmes add to the complexity of compiling comparative data, making assessments between institutions difficult. Michelle Morgan (2014, p. 1162) highlights the absence of macro enrolment data, urging the higher education sector to find ways to record reliable data on application and enrolment levels, in order to get a clear picture of postgraduate study and enrolment trends. In addition to the changes in tuition costs and tuition fee models and the competition of institutional ranking, institutions began to see an emergent ability of applicants to get copious amounts of informal and uncontrolled information about institutions through social media (Selwyn, 2012; Davis III et al., 2015). Such dynamic changes to the environment forced the enrolment management concept to switch to the more strategic focus of moving the student efficiently and effectively toward academic success (Black, 2010).

The current enrolment management model has three sections beginning with the recruitment of a prospective student, following that prospect through the application process to enrolment, and ending with the student's on-time graduation.

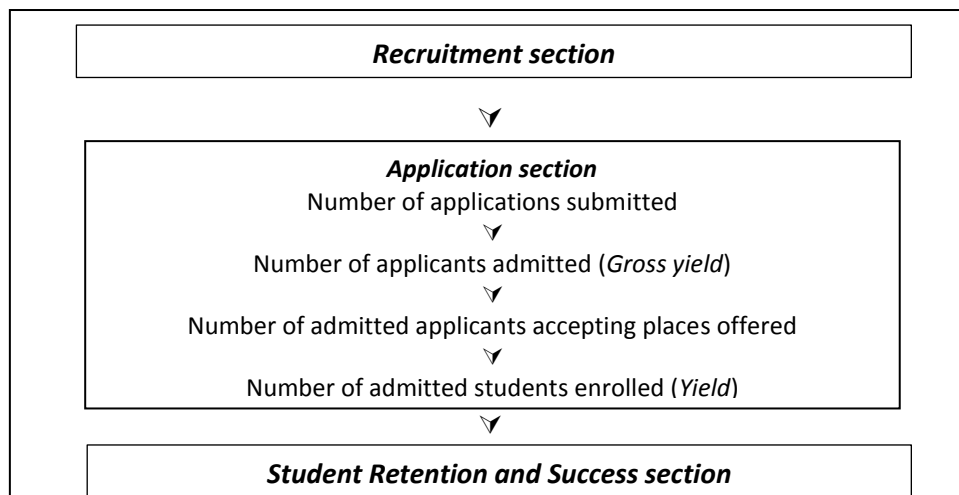


Figure 2 Model of the enrolment management system

Figure 2 details the application section of the model which is the stage relevant to this study. With falling enrolment at the institution during the period in question, any substantive variation between the gross yield and yield demands an investigation, and this study provides a view into that transition.

1.7 Summary

In this chapter, I introduced the study, its context and the rationale for undertaking it. I justified the claim to originality, detailed the basis on which I established methodological rigour, and explained the contribution of the study to literature on the subject as well as its practical usefulness. I traced the development of higher education in Barbados, outlined the various tuition fee policies in that island state and showed the effect of the policies on attendance at the Cave Hill Campus. Finally, I provided the context of the Cave Hill Campus within the central University of the West Indies and introduced the related field of enrolment management.

2. Literature Review

2.1 Conceptual framework

This section outlines the literature search and the formulation of the research question. After presenting an analysis of literature related to the topic and showing the gap in the specific area, the chapter continues with the research question, three sub-questions, and concludes with a summary. I deliberately took the decision to start the literature search at the wider higher education sector. There is a vast amount of work done with regard to students and decision-making at the undergraduate level, and I believed that some of those findings could be relevant to this higher level of study. Figure 3 illustrates the conceptual framework that provided the lens for this study.

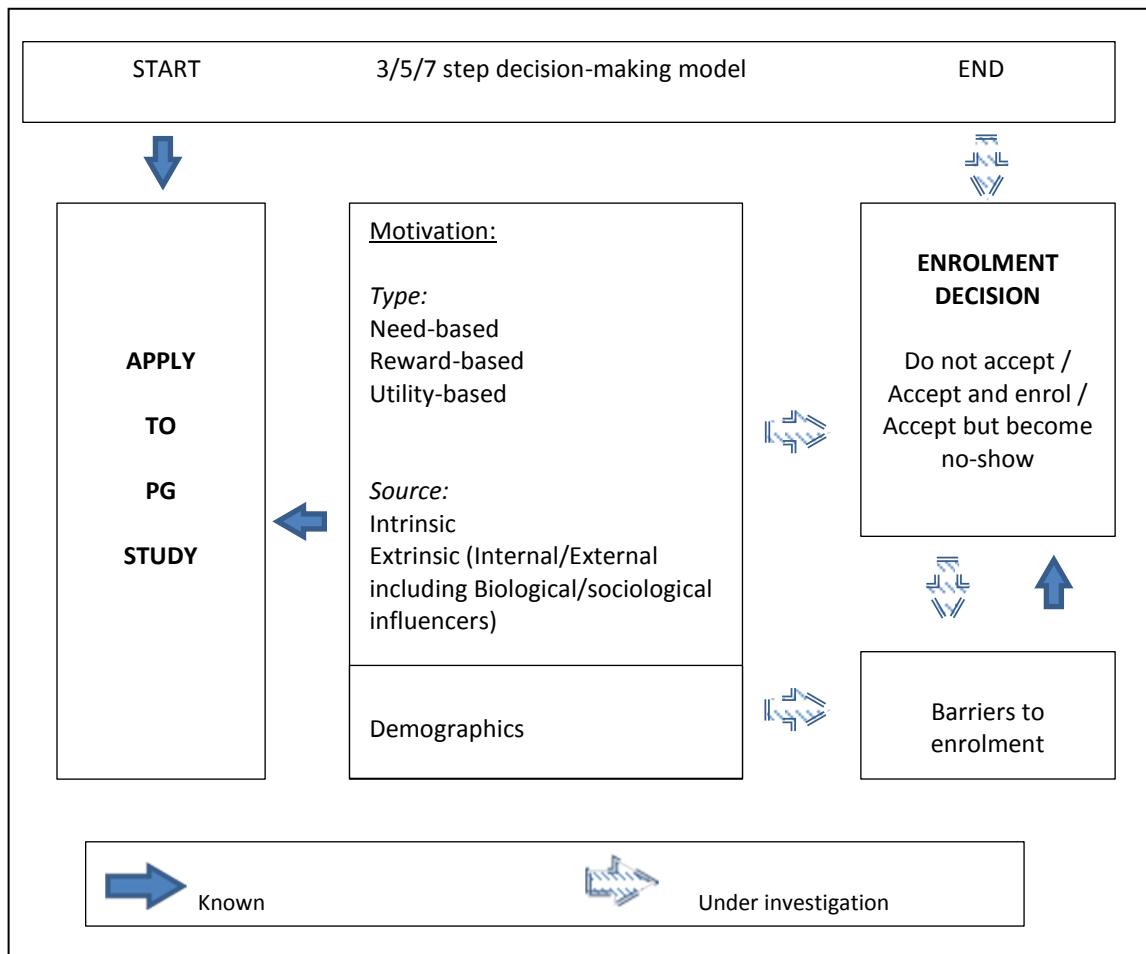


Figure 3 Conceptual framework for study

Three broad areas of theory formed the conceptual framework; the decision-making around engaging in higher education, and the two elements that influence the start and end of that process. These two elements are the motivation to apply (at the start of the process) and the barriers that inhibit the conversion of an applicant's motivation to action (at the end of the process). The solid arrows in Figure 3 denote links that are undisputed between motivation and the submission of an application, and between barriers and the enrolment decision. The dotted arrows show the connections under investigation here - between motivation / demographics and the enrolment decision; and between motivation / demographics and the barriers to enrolment.

Decision-making and motivation theorists have provided much material on these two topics, and I explore this material in subsequent sections. I found less direct material on the topic of barriers to enrolment, but the field of adult learning provided a useful point of reference. Within that literature, I found barriers to adult learning categorised in three ways. The first category relates to the situation existing at the given time, the second to the practices and procedures of the institution in question, and the third to the student's attitude to learning and general disposition. Patricia Cross (1981) identifies this method of grouping and, even though she was referencing a different target population of less higher-achieving adults, her grouping provides a relevant structure through which one could consider the effects of different types of motivation.

2.1.1 Limitations for postgraduate enrolment research

In large countries like the US, Canada, UK, and Australia, centralised undergraduate enrolment systems provide access to a wide range of secondary data in a consistent format readily separable into suitable datasets for analysis. Data are available, for example, through the US Department of Education, Universities Canada, UCAS (Universities and Colleges Admissions Service) in the UK, and Universities Australia. Therefore, it has been possible for researchers to access relatively granular information for research, including information on the undergraduate application process and outcomes, and to monitor trends. For example, secondary data are available to show

that in the 1960s half of the college undergraduate applicants in the US were likely to apply to only one institution (Palmer et al., 2004, p. 34), but in 2015 in the US, 80% of applicants applied to three or more institutions, with 36% of applicants applying to seven or more institutions (Clinedinst and Koranteng, 2017). Once an undergraduate has enrolled in a three or four year college, it is possible to undertake primary cross-sectional as well as a longitudinal data collection by surveying, interviewing and/or hosting focus groups to query aspirations and motives. Through this type of contact, a researcher can investigate how undergraduates had received, filtered, and managed the information available to select a short list of colleges and make final decisions, as well as their post-graduation plans.

This approach does not work at the postgraduate level for a few reasons. Up to ten years ago, widespread and accessible postgraduate education was still considered a comparatively 'recent phenomenon' (Wakeling, 2009, p. 48) that had not reached the same stage of ubiquity as undergraduate education. Identifying a target population of potential postgraduate students for research remains a difficulty, a point made by Gary Rivers (2005, p. 22) explaining the challenge he faced when examining university selection in Singapore. Studies carried out among existing final year undergraduates to determine intentions to progress to postgraduate study, found for example: a positive relationship between undergraduate research participation to graduate and professional education pursuit (Hathaway, Nagda and Gregerman, 2002); a lack of influence of the opinions of parents on decisions to proceed to postgraduate study (Mullen, Goyette and Soares, 2003); a negative effect of the passage of time on the intent (Jepsen and Neumann, 2010); and, a need for timely information about postgraduate study and options (Jepsen and Varhegyi, 2011). However, even where studies revealed an intent to continue to postgraduate study once qualified, in actuality people were unlikely to continue directly after a first degree (Wakeling, 2009, p. 53), citing the burden of undergraduate debt as a common cause. I found no basis to support a framework for the progression of undergraduates to postgraduate studies.

Secondly, there is no single defined route to postgraduate education. A prospective postgraduate student could come directly from an undergraduate programme, from the workforce, be a graduate reverting to academia after the lack of success in finding a suitable job, or even a person at or nearing retirement fulfilling a dream. Therefore, potential candidates often remain unknown until they signal their intent by completing application forms. The programme structure is also a limitation for identifying and probing a target population as, except for research master degrees, many postgraduate diploma and master programmes are of relatively short duration lasting just one year.

Thirdly, I could find no central admissions system for postgraduate applications. In addition, the application process can vary between and even within colleges, sometimes distributed down to the department level. So secondary data detailing all of the institutions/programmes to which a potential postgraduate student has applied are not available for analysis. This type of research into the decision-making process has only been possible *after* applicants have enrolled in an institution and are willing to participate in a study retrospectively, for example, the qualitative one done at the University of Oxford by Mowjee (2013) investigating the assumption of the postgraduate student as a rational decision-maker.

The 2016 UK Postgraduate Experience Study (PES), to which I referred earlier, explained in detail the challenges the team faced when attempting to investigate barriers to enrolment (Morgan and Direito, 2016, p. 23). The research team separated the non-enrolled applicants into four groups as follows:

- Group A: potential applicants who enquire but do not apply;
- Group B: applicants who apply, get an offer but decline;
- Group C: applicants who apply, accept, but notify the university of non-attendance before commencement; and
- Group D: applicants who apply, accept, do not enrol and do not notify the university of non-attendance before commencement.

The PES report went on to outline the difficulty in collecting data about these four groups stating:

‘Firstly, nearly all the universities did not collect and keep enquiry data on individuals. This was further complicated by course enquiries being undertaken by a range of different units within an institution, such as the faculties and departments, central marketing and the international office. Secondly, information on groups B–D is recorded differently by each university so making direct comparisons against the group definition proved problematic. The universities within the project do not operate customer relation management systems, enabling an application to be tracked from first contact and beyond. This meant that the sample response was small and not reflective of the participating partners. This lack of data prevents an accurate understanding of motivations and drivers amongst these groups.’

Finally, some higher education studies prior to 2000 addressed issues about postgraduate students, for example college choice decision (Kallio, 1995), the nature of demand for postgraduate information (Hesketh and Knight, 1999), human capital theory and motivation (Pratt, Hillier and Mace, 1999), the differing social and academic needs of postgraduates (Humphrey and McCarthy, 1999). Even so, until then the contribution of the postgraduate student appears to have been under-appreciated. In fact, postgraduates had been generally overlooked even for research into student experience, perhaps from an assumption that having had an undergraduate experience, postgraduates should be able to ‘take care of themselves’ (Gaskell, 2009, p. 193).

In addition to Barbados, in a number of countries, including the UK (Wales, 2013; Whitty and Mullan, 2013), the US (Sallie Mae and Ipsos, 2017), and Canada (THE, 2017), postgraduate students typically finance their own studies. Therefore, postgraduate students are very important to the income of institutions. After changes in tuition fee policies worldwide that substantially reduced the amount of government funding for higher education (Marginson, 2001; Marcucci and Johnstone, 2007; Armbruster, 2008; Miller, 2010), there was an increase seen in research within this sector. These studies included the information needs of students in taught postgraduate programmes (Dye, 2013), the inequality in access to research degrees (Wakeling and Kyriacou, 2010), understanding the international postgraduate student (Mazzarol and Soutar, 2002; Brown, 2008), the way adults learn and motivational dynamics (de Oliveira Pires, 2009), educational transitions and support for returning learners (Zimdars, 2007; Donnell et

al., 2009), and motives, preparedness and other issues that arise when expectations of postgraduate education do not match with reality (Liu, 2010; Peters and Daly, 2013). But, there is still much to learn about this category of student who Tobbell and O'Donnell characterise from a qualitative research study conducted over the period of a year in the UK involving 230 postgraduate students, as 'surprisingly full of doubts and lacking confidence' (2013, p. 1052).

2.2 Literature Search

I conducted the majority of the literature search using online databases available through the University of Bath, the Web of Science and Google Scholar. Google Scholar was particularly helpful in narrowing options and finding articles most prominently cited in the field. Because of the interchangeable terms, I conducted searches using the word 'graduate' and repeated them with the word 'postgraduate'. Other search terms included 'student choice', 'student decision making', 'college choice model', 'graduate application', 'barriers to enrolment', 'barriers to adult learning', 'factors affecting enrolment', 'motivation to apply', 'graduate student choice', and 'graduate decision making'. In addition to peer-reviewed papers, I also considered reports and dissertations related to the topic in any way. The search was not limited to any period as some of the older work is seminal.

The first area I explored was the decision-making process of a prospective student. The discussion of a number of motivation theories and a framework for considering barriers to the conversion of motivation to apply into action follow.

2.2.1 Theories related to the college choice process

The myriad changes within the higher education sector in the post-World War II period through the fluctuations in college attendance (Palmer et al., 2004) attracted the attention of a multiplicity of researchers. Some of these researchers applied and developed various models of the behaviour of prospective students when faced with making choices about higher education. This research showed that, regardless of

context or continent, prospective students go through a number of stages in deciding whether they should attend a college/university, and then in selecting which institution to attend. These college choice models are similar to each other in suggesting the stages through which an applicant would pass, with variations between the models on how to group activities into stages. In addition to differences in grouping activities into stages, some models end at the point of enrolling, while others go past that decision to include an additional stage of evaluating the decision and providing feedback. The stages vary in number from as many as seven to as few as three, and before focussing on the particular elements of relevance for the study, I will mention a few of the models as applied to the higher education sector.

Engel's (1968) seminal consumer decision model based on research in the marketing field, as applied to higher education, suggested a five-point decision process: (1) recognition of problem or need; (2) search for and gathering of information; (3) evaluation of alternatives; (4) making of choice; and (5) post-choice evaluation. Kotler (1976) also applied marketing concepts to the college admission process but identified seven stages instead: (1) making the decision to attend; (2) seeking for and receiving information; (3) making specific college inquiries; (4) submitting one or more applications; (5) assessing acceptances; (6) selecting college, and finally (7) registering.

Randall Chapman (1986, pp. 246-250), while acknowledging that each of his suggested stages might not apply to all prospective students, posited a five-stage behavioural college choice model with the stages of (1) pre-search; continuing with (2) search; (3) application decision; (4) making final choice and; (5) registering, with the terms explained in the following way. At Chapman's pre-search stage, people initially start thinking of entering higher education. During the search stage, prospective candidates start investigating all possible institutions and put together a short-list of places to which they would apply. In the application stage, each candidate completes and submits applications to multiple institutions. During the choice stage, the candidate assesses offers and selects one offer and finally, at the enrolment stage candidates register at the institution of their choice.

However, there is a fundamental challenge with such linear process-type models in that there is a significant volume of information (presented in diverse ways), through which a candidate would have to sift, in order to make equitable comparisons between institutions and programmes, before moving from one stage to the next. Students were definitely making decisions about attending college, but was there really a systematic review of information taking place? David Chapman (1981) brought attention to this point when he reported on (1) surveys of admissions professionals and guidance counsellors in the US to measure the effectiveness of recruiting activities from their perspective, the accuracy of information made available to applicants, and the activities which institutions thought influenced student choice; (2) surveys of students about the importance they assigned to the printed material they had received from institutions; and (3) existing printed college promotional materials. In particular, Chapman described an investigation he had undertaken with Russell Johnson into how students of traditional university age (18-22) used the information made available to them by institutions to make decisions. Chapman (*ibid.*, p. 490) contended that efforts by institutions to improve their chances of selection by prospective students through the issue of printed material were being made without a good understanding of what influenced student decisions, and how prospective students actually used the information made available to them.

Chapman's work was revealing because he provided evidence that information sent by institutions to prospects was less influential in the college search process than assumed, with the applicant more often relying on the opinions of others. From his findings, Chapman (*ibid.*, p. 492) asserted that three sociological/environmental factors influenced the college/university choice at every step of the way: the background and characteristics of the prospective student (socioeconomics, aptitude, expectation, high school performance), external influences acting on that prospective student and the prospective student's expectations of what college life would actually be like. He pinpointed three external factors as influential: the people whose opinions candidates deemed significant, the specific characteristics of the college/university, and the effort

the college/university made to reach out and communicate personally with their candidates. Such findings showed that a student could select a college because of the influence of a neighbour, friend or coach, the clarity of the application process, or the friendliness of university staff just as easily as an assessment of the actual suitability of the academic programme to their career plans. This type of approach to making decisions considered as possibly a result of the youth and inexperience of the traditional undergraduate student.

Unlike undergraduate education, apart from in certain professional fields a postgraduate degree has not yet reached the stage of an essential qualification. Therefore, there is not only a choice of *where* to attend, but *whether* a postgraduate degree is even necessary. It is an expensive qualification that also requires the investment of a significant amount of time and effort. The assumption could be that a person making the commitment to a higher degree would be older, more experienced and aware, approaching such a decision systematically and objectively after a complete analysis of the choices, balancing the options with the opportunity cost (factoring in lost wages), and coming up with the solution which provides the best economic outcome.

However, research has shown that comprehensive, objective cost-benefit analysis is not necessarily the approach at the postgraduate level (Menon, 1997; Mowjee, 2013), with decisions for this level of study having other foundations, including expected success (Pratt, Hillier and Mace, 1999), and the prospect of intellectual challenge and stimulation (Rochat and Demeulemeester, 2001). Further to this, and similar to an undergraduate student, a prospective postgraduate who wanted to make a choice based on the best fit and best value for money would have difficulty with the lack of complete and accurate information, sufficient relevant past experience in a similar situation to provide a roadmap, and a systematic method of identifying and weighting institutions.

There are alternative ideas of what influences decisions that take cognisance of the difficulty of a rational, i.e. a systematic and objective, approach. One such idea emanates from the field of behavioural science and suggests that the decisions people actually take are comprehensively different to what one might expect, because people employ methods, including emotional responses and rule-of-thumb, to reduce uncertainty and complexity (Dolan et al., 2011). The table following reproduces the MINDSPACE framework (p. 266) which captures this concept. Dolan et al. suggest that the behaviour cue could either be intentional, intended to nudge people in a certain direction or be unintentional. The framework outlines what might transform information concerning choices into a format capable for use in cognitive processing.

Table 6 The MINDSPACE framework for behaviour change

MINDSPACE	cue behaviour
Messenger	We are heavily influenced by who communicates information to us
Incentives	Our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	We are strongly influenced by what others do
Defaults	We 'go with the flow' of pre-set options
Salience	Our attention is drawn to what is novel and seems relevant to us
Priming	Our acts are often influenced by sub-conscious cues
Affect	Our emotional associations can powerfully shape our actions
Commitments	We seek to be consistent with our public promises, and reciprocate acts
Ego	We act in ways that make us feel better about ourselves

Of note is the suggestion of the authors that, even if the intervention was fleeting, the effect could be long-lasting, although 'behaviour and decision may have been changed in that interval' (2011, p. 274). The framework provides a perspective of acting on a thought to attend college driven by emotion, the person who communicated the suggestion to undertake the programme, personal or professional respect for the messenger, how the messenger made the suggestion, what decisions other people have taken, and any public utterances of the intent to seek qualification.

Results from a mixture of large scale quantitative and small scale qualitative studies investigating the decision of undergraduates to re-enrol (or not) for postgraduate study included some behavioural science reasons. These include the effect of the higher education experience of family/partner, the wish to provide a positive influence for

their children, family norms, unspoken expectations and attitudes to higher education (Stuart et al., 2008); perceived social pressure from friends and family based on a belief that high academic qualifications improve social class and upward mobility (Lai, 2014); a high level of prior academic qualification, the advice from academic staff or employer, and the expectation of increased social mobility (Ball, 2016).

While the components of any college choice model are important, on the island where the research took place there is a singular lack of choice for face-to-face higher degrees. The island is very small (166 square miles in total) and, during the period covered by the study, the institution in question was the only one delivering a range of degree programmes in this format. Therefore, many of the factors shown to be relevant in studies undertaken in larger, more developed countries simply do not apply. One could consider the Cave Hill postgraduate student pool as 'captive', especially for face-to-face students who are in the workforce. Therefore, the choices become: whether to go at all, and then, which *programme* to take rather than which *college* to attend. The influence of student loan debt burden is also not characteristic as, because of the long-standing policy of government support for undergraduate education for nationals, most local students end their undergraduate career with absolutely no debt.

Regardless of the steps in between initial motivation and enrolment, something has to trigger the decision to attend college, and something has to guide the student toward starting (or not starting) classes. The *de facto* standard college decision-making model, developed by Hossler and Gallagher (1987) after a review and synthesis of models at the time, reflects a simple three-stage approach and is a point of reference herein. This model retains a high-level linear order with the stages defined as (1) predisposition, formation of aspirations or motivation; (2) identification, selection of acceptable options; and finally (3) selection of the preferred choice, enrolment, and attendance. The model remains commonly accepted and cited, by both undergraduate and postgraduate student choice researchers, as a useful framework for analysis.

This study concerns the first and last stages of the college decision-making model only. Therefore, I took a deliberate decision to *not* separate out the sociological and behavioural factors as an additional layer suggested by (Perna, 2006) in her conceptual expansion of the Hossler and Gallagher model, but to consider external factors as influential throughout the entire process. This is because the external environment factors affect the predisposition/motivation, selection and enrolment stages so have an impact on all decisions taken.

2.2.2 What motivates an application?

Does a secondary or high school student regard higher education as a dream, a consideration, a possibility, an obvious choice, or an absolute necessity? Review of the literature shows shifts in responses to this question from the pre-World War II period, where higher education was far from the norm, to the current day where it has become a matter of course (Palmer et al., 2004). Researchers can carry out studies about undergraduate pre-disposition/motivation when students are in high or secondary school when the target populations are well-defined and available. Interestingly, research reveals that the pre-disposition/motivation for college stage often commences *before* the prospective candidate had even entered high school (Harding, Parker and Toutkoushian, 2017). So, when does motivation for a higher degree begin, and what is the target population for this level of study?

With the exception of research on the plans of final year undergraduate students referred to earlier, most of the studies found related to motivation to study at postgraduate level are retrospective. In the typical college or university *New Student Survey*, researchers ask newly-enrolled students to think back to the time before they started the programme and to share what motivated them. However, such retrospective studies are shown to be prone to bias, or faulty recall (Bernard et al., 1984). In addition, after students have enrolled in an institution the relationship with that institution changes, and newly-enrolled students could perceive that ‘inappropriate’ responses could influence their academic progress or administrative

contact in some way. Furthermore, this type of retrospective study cannot include qualified, admitted, but *non*-enrolled candidates. Therefore, the studies found could not provide information on what motivated an applicant to apply where factors intervened causing that particular applicant not to enrol.

A number of theories of motivation found were relevant to the decision to attend college, and from these theories, I identified some factors for use in the study. The relevant theories follow in generally a chronological order, along with the way prior research into both undergraduate and postgraduate education decision-making make use of these theories.

2.2.2.1 Theories of motivation

It was difficult to classify motivation theories in a manner that does justice to their nuances. Some theories define motivation as a trigger to action based on a person's individual needs, others classify motivation as triggered by the possibility of a self-determined reward, while there are others that treat with motivation as externally-driven and based on some type of expected utility. There is much crisscrossing of factors among the theories and in the sections following, I attempt to group theories under broad headings for review. The first group of theories encompasses those based on needs.

Needs-based motivation theories

Merriam-Webster's dictionary defines a *need* as a 'situation in which someone or something must do or have something'. Motivation theories based on the concept of needs maintain that the behaviour of individuals relates to their particular needs, and if one can understand these needs, then understanding the behaviour will follow. These needs-based theories are similar except for how each scholar has created groupings of needs.

Suggested by McLeod (2007) as based on an analysis of biographies and writings of 18 highly educated white males Maslow himself identified as self-actualized, in 1943

Abraham Maslow presented his well-known theory of motivation which placed peoples' needs into groups (Maslow, 1943). Maslow posited that people exist within a hierarchy of needs with basic physiological needs (food, water, shelter) at the base as level one, safety needs as level two, social needs (rewarding relationships with others) at level three, esteem (recognition of one's effort, respect) at level four, with a top-level need of self-actualization (achievement of one's life goals, self-satisfaction). In Maslow's view, individuals could not progress upward from any current level until they met needs at the existing level. Maslow expanded his model some years later to include additional layers of cognitive, aesthetic, and spiritual transcendence needs (Maslow, 1970a, b). In addition to the subjective methodology, researchers found flaws in the theory and experienced difficulty trying to prove the existence of such a hierarchy (Wahba and Bridwell, 1976). Regardless of the criticisms, the original Maslow model remains oft-cited in the field of psychology and treated as seminal.

McGregor (1957) drew on Maslow's model to propose a very useful theory of how needs drive behaviour. In fact, McGregor described Maslow's work as the 'most fruitful approach' (ibid., p. 8) that he found would explain the inadequacy of the industrial management style in vogue at the time. McGregor presented his 'Theory X' and 'Theory Y' as a set of propositions suggesting that understanding motivators of behaviour would help managers to manage their workers better. McGregor classified the style of managers who operated from a perspective of external control of their employees through manipulation as Theory X, with an alternative style based on providing positive motivation as Theory Y. Essentially, Theory X managers controlled their workers through punishment, unpredictability, and discrimination, while Theory Y proposed that managers should provide a motivating environment where the employees could satisfy higher order needs based on self-direction and control. In McGregor's belief, the environment of a Theory Y management style created motivated employees who provided greater value to their organizations.

Using data collected from a qualitative study of a population of professional accountants and engineers, Herzberg introduced the term 'hygiene factors', defining

these as a baseline set of needs (company policies, supervision, working conditions, salary, safety, and security on the job), the absence of which he believed provided *dissatisfaction* in a workplace (Herzberg, 1959). In Herzberg's theory, only after employees ascertained that these hygiene factors were in place would motivation become a driver of behaviour. Herzberg posited that, once the hygiene factors were in place, higher order needs (which he called 'satisfiers') would influence employees who would then actively seek work that was challenging and rewarding, and ultimately become more productive members of staff.

In a manner similar to Herzberg, McClelland (1961) also disputed basic physiological and hygiene-type needs as providing motivational influences. McClelland theorised that all people have three needs that provide motivation, a need for achievement (esteem and self-actualization), a need for affiliation (social), and a need for power. He suggested that one of these needs emerges in individuals as dominant, and the dominant need motivates individuals and drives their behaviour. Following an empirical study, Alderfer (1969) proposed the Existence/Relatedness/Growth (ERG) theory with a revised view of Maslow's hierarchy repeating the five original needs, but regrouping and removing them from a hierarchical structure. The ERG theory combined Maslow's level one and two (physiological and safety) under the heading 'Existence', maintained social needs alone under the heading 'Relatedness' and placed the two higher order needs of esteem and self-actualization under 'Growth'. Alderfer argued that it was possible for multiple needs to drive behaviour at the same time, suggesting that if one group of their needs was not satisfied, people would subconsciously shift their effort to meeting another.

These approaches suggest that, apart from the basic physiological needs, the impetus that drives behaviour emanates from within people, derived from varying levels of desire for personal satisfaction. Deci (1985) (as cited by Ryan and Deci, 2000, p. 5) in his Self-Determination Theory (SDT) proposed that motivating influences were *not* all based on satisfying individual needs, but that the prospect of reward could motivate an individual. Deci used the term *intrinsic* to describe the group of motivating influences

driven solely by pleasure, satisfaction and fulfilment, filtering out all other motivators as *extrinsic*. Using this terminology, people motivated by intrinsic needs could undertake a postgraduate degree for the love of studying, for personal satisfaction, or the intellectual joy of being with others of like mind. Deci posited that, unlike intrinsic motivators, extrinsic motivators developed from the expectation of receiving a reward. Still, a reward could be a personal goal, perhaps adding to the number of diplomas on a wall, or alternatively, the result of external influence, such as meeting the qualification requirement of a higher level job.

The Carré model (1998; 2001 cited by de Oliveira Pires pp. 134-135) mirrors my belief in the importance of understanding the dynamics of motivation. However, that model is very fine-grained, suggesting three subcategories of intrinsic motives (epistemic, socio-emotional, and hedonic), and seven subcategories of extrinsic motives (economic, derivative, professional operative, personal operative, identity, vocational, and prescriptive). In this study, I maintained the broad category of intrinsic motives and considered the concept of extrinsic motivation at the level of either internally-driven and the result of a personal desire, or externally-driven and the result of imposition.

Internally-driven extrinsic motivation theories

Motivation theories I considered under the heading 'internally-driven extrinsic' are those concerned with the personal benefits expected after reaching a specific goal or reward. Theories falling into this broad category include Equity Theory, Expectancy Theory, and Goal-Setting Theory, which provide potential reasons for undertaking a higher degree. From a number of observational field studies and laboratory experiments, Adams' Equity Theory (1963) proposed that people would do something if they felt the effort was worth the reward. This theory, often applied in a work setting, could provide motivation for acquiring a postgraduate degree if an employee believed that such an effort would reflect in the reward of a better relationship both with co-workers and the workplace.

Expectancy Theory (Vroom, 1964) reflects individual differences in work motivation, identifying a number of things that could motivate an employee. Vroom posits that motivation can result from changing the person's effort-to-performance expectancy, performance-to-reward expectancy, and the perceived emotional value of the reward. Vroom suggested that goals can motivate people who perceive that the goal itself is doable, that they are capable of reaching the goal, and that the activity was worthwhile in terms of the outcome they expect on completion. Prospective postgraduate applicants motivated this way might only start the process if they perceive that they would be successful, and on completion would receive a reward of benefits, including appreciation.

A third viewpoint called Goal-Setting Theory (Locke and Latham, 1990), suggests motivation due to the possibility of recognition with positive feedback after achieving challenging, reachable goals. This theory might explain the motivation of a postgraduate research student who on completion would receive the reward of a change of honorific to 'Dr'. This theory is very much entrenched in current employment goal-setting performance appraisal systems with employees often urged to set specific, measurable, achievable, relevant and time-related (or SMART) goals (Doran, 1981).

Externally-driven extrinsic motivation theories

Some theories in the field of economics build on the notion that the expectation of reward from external sources can influence motivation. Two specific theories related to possible employment effects, particularly significant to a potential postgraduate student, are Human Capital Theory and Signalling Theory. Human Capital Theory (HCT) is most often associated with Gary Becker, a 1992 Nobel-winning professor of economics at the University of Chicago. After an empirical examination of several effects of varying amounts of education, such as age-earnings and age-wealth profiles Becker (1975; 1993) calculated that the economic value brought to an organization

through a higher educated workforce was more than the cost of the education; therefore, concluding that higher education was a worthwhile investment.

Research continues on HCT investigating the effect of variations in relative income returns and unemployment on educational decisions. This work includes an empirical study that found evidence of a differential in the way the business cycle of economic upturns and recessions impacts male and female decisions to enrol in postgraduate programmes (Bedard and Herman, 2008); an analysis of the effect of risk of the education decisions of individuals (Hogan and Walker, 2007) that found people stay in education longer when financial gains for education are high; and, an analysis testing the robustness of HCT over the presence of more innovative businesses that found HCT to be a stronger predictor of income (Hoyman and Faricy, 2009). There have been criticisms of HCT as methodologically unsound and 'lacking realism' (Marginson, 2017, p. 6); 'economistic, fragmentised, and exclusively instrumentalistic', and ignoring the intrinsic importance and social roles that education fulfils (Robeyns, 2006, p. 69) and, of not recognising that one has to consider the contribution of a person under a number of different, more non-material, headings including cultural, social, and symbolic (Bourdieu, 2011). However, whatever the criticisms of HCT, once employees perceive that employers view higher education as a worthwhile investment, then HCT becomes a potential motivator.

Michael Spence's (1973) Signalling Theory provided an alternate way employees might think about returns to education investment. Spence posited that the value of a person with higher qualifications is not necessarily because of the *actual* possession of a particular qualification as that alone does not denote productivity. Spence suggests that observable attributes of people signal their value to the organisation. Thus, employees may perceive that by the act of enrolling in a higher level qualification, they are providing a signal of an employee with a more valuable state of mind. The discussion of the effects of HCT vs. Signalling has continued with work by Chevalier (2004) that found in favour of HCT; Kjelland (2008) that was inconclusive, Park (2012) that found differences according to innate education ability, and more recently by Di

Pietro (2017) as well as Feng and Graetz (2017), who both found that a higher class of degree did provide a signal of productivity.

Whether an employee believes that engagement in education provides evidence of productivity, or that possession of the actual qualification provides evidence of ability, both theories appear relevant and reflected in studies that set out to quantify the value of postgraduate study. For example, studies have been undertaken in the UK for the Institute for Employment Studies (Barber et al., 2004), the Department of Business Innovation and Skills (CIHE, 2010), and in the US for the Council of Graduate Schools and Educational Testing Service (Wendler et al., 2010). Referred to as the 'postgraduate premium', in the UK in 2010, postgraduate education increased the expected salary of a person by 15-23% (Machin and Murphy, 2010, p. 23). The 2013 Sutton Report compared the trend in the US and UK finding a steady increase over time in both jurisdictions (Lindley and Machin, 2013). A Higher Education Commission (2012) UK Government report went further to suggest that there is a genuine demand by employers for higher qualified graduates with master degrees. The postgraduate premium augments the perception of a value-added product, creating a powerful source of extrinsic and externally-driven motivation.

2.2.2.2 Prior research into postgraduate motivation

While I found no research relating enrolment decisions after accepting an offer to demographics or to motivation at the point of application, I found a number of investigations based on the many theories of motivation carried out within the postgraduate sector. The prior research, some of which I present here, informed the formulation of questions for one section of the survey. However, one point to note is that most of the studies of postgraduate enrolment I found are specific to a single field of study, and most of the PhD studies investigated small samples of students making generalisation impossible.

The closest study I found in terms of design and approach is 20 years old. Delaney (1999) conducted that study on behalf of a US graduate business school that had

recently implemented a new MBA curriculum. The business school wanted a thorough understanding of the motivation and factors that influenced the final enrolment decision of students to the programme. The study surveyed 238 accepted students, including some people who ultimately did not enrol, and found the top three motivations of the expectation of career advancement followed by personal fulfilment and career change. However, the researcher did not attempt to relate the final enrolment decision to demographics or the original motivation of the applicant, and did not identify barriers for the students who did not enrol.

My research found a combination of intrinsic and extrinsic motivators for starting a postgraduate taught degree programme, with extrinsic motivators appearing more prominently. From a mixed-method study at a business school in Scotland, Donaldson and McNicholas gathered responses from 102 enrolled students who reported primary motivations of a desire to progress in their career, to change to a new career, and to earn a higher salary (2004). US Marketing students reported intrinsic followed by career goals (Liu, 2010); a qualitative study involving 21 participants undertaken in Hong Kong in 2010 found motivators related to a strong influence of family and the general importance of higher education (Ho, Kember and Hong, 2012), and a qualitative study of 14 international students at Oxford reported motivators of future careers as well as the prospect of intellectual challenge and stimulation (Mowjee, 2013).

Findings from larger scale quantitative surveys, for example, the UK Postgraduate Experience Taught Masters Survey (Park and Wells, 2010) reported career prospects followed by personal interest, and the Postgraduate Experience Project in the UK (Morgan, 2013) found motivators of gaining further knowledge of the subject and improved career prospects. Using the approach of surveying people who had registered with the Graduate Management Admissions Council between 2003 and 2005, a questionnaire completed by 1500 prospective MBA students, selected at random, revealed primary motivators of career enhancement, career switching, and personal development for job success (Marks and Edgington, 2006). Another empirical

study based on a project, between 2003 and 2006, involving students enrolled in a range of disciplines and postgraduate degrees at four universities in Portugal, found primary motives of acquiring new knowledge, the prospect of intellectual development, gaining an ability to do their current job better, and the potential for professional progression (taught master students); a sense of belonging to the academic community, and improving job performance (PhD students) (de Oliveira Pires, 2009).

A qualitative study with 17 students in a professional Instructional Leadership doctorate provided a mixture of intrinsic, internally-driven and externally-driven extrinsic motivations including the expected achievement of a personal goal, the expectation of finding pleasure in learning, the desire to prove their abilities to other people, and a way to enter or advance in a career (Jablonski, 2001). A qualitative survey with 29 participants in a professional Doctorate in Education (Wellington and Sikes, 2006) found participants motivated by a quest for knowledge, the expectation of an intellectual challenge, a desire to confirm their positive sense of identity and the desire to keep a job secure. In 2016, Hawkes conducted a study which analysed interview data gathered over a 2-year period, recorded from 113 applicants for entry to a Doctorate in Education in the UK. He found primary motivations to address long-standing 'problems of practice', the anticipation of a change in career, and a nudge from their employer to acquire a doctorate (Hawkes, 2016).

Studies on the motivation for academic doctorates (PhDs) revealed intrinsic, internally-driven extrinsic and a few externally-driven extrinsic motivators. A survey questionnaire conducted in Latvia of 306 students who had applied to or enrolled in a wide range of disciplines found primary motivators of achieving something new, continuing an enjoyable learning/research experience, paving the way for improved career prospects, and contributing to the field (Tarvid, 2014); a qualitative study in New Zealand with 11 History students found commitment to the topic, a desire to excel academically, and wanting to prove themselves to friends/family/advisors (Brailsford, 2010); and, survey responses from 338 students embarking on a doctorate at one

university in Australia revealed ‘a genuine interest in the topic’ and a ‘desire to contribute’ as the major driving forces (Guerin, 2015, p. 98). Leonard found the primary motivation of 89 people who had successfully graduated from a range of research degrees in the UK (including the Master of Philosophy), as the need for personal growth and a desire for training and development (Leonard, 2005); and a qualitative study of 35 Counselling Education and Supervision students in the US found the top motivators to be wanting to be a professor, having a desire to prove themselves, to work towards a secure professional future, and to be a leader in the field (Hinkle et al., 2014).

In summary, postgraduate students in taught programmes provided more extrinsic than intrinsic motivators, with participants often viewing a higher degree as a way of career advancement, a signal of projected ability, or a direct contribution to the human capital of their organization. The motivators of students seeking professional doctorates aligned more with the taught degree students, with professional doctorate students more often citing reasons of career advancement and enhancement, personal fulfilment, and a need to prove their abilities to others. Research students more often reported intrinsic motivators involving the development of knowledge, a contribution to their respective fields, wanting to excel academically and a desire to become a leader in the field.

2.2.3 Barriers to enrolment

The problem of non-enrolment after acceptance is one that higher education administrators face at the start of every new academic year. When students do not communicate their decision not to enrol, administrators only become aware of the intent to default at the end of the period in which new students register. If candidates signal their intent early enough the wait-listed candidates could fill empty seats, but late or no notification makes this possibility unlikely, as the wait-listed candidates may have accepted an alternative offer, and in the process of enrolling elsewhere. The challenge is more acute at the postgraduate level because classes are significantly

smaller, and a specialised programme could legitimately start with fewer than 20 students. 'No-shows' result in reduced income for the institution, time and resource wastage, the possibility of running a programme at a loss, and could even lead to cancellation of marginally profitable programmes. Such a practical problem could only benefit from the contribution of theoretical knowledge and the guidelines for a review of policies.

Having widened the search for barriers to enrolment to include barriers to *adult learning* as mentioned earlier, I found a very useful framework that grouped the challenges faced by adult-learning students into 3 broad areas – situational, institutional and dispositional (Cross, 1981). As postgraduate students are adults, I applied that thought process to the current study. *Situational* barriers could be anything related to the situation at the time the candidate would be making the final decision to enrol, including such issues as transportation, family responsibilities and time or timetable constraints. *Institutional* barriers could be those created by the institution's programs, policies, and procedures, including issues with admissions and registration, the lack of timely, consistent and complete information and late changes to the course schedule. *Dispositional* barriers could be anything related to an individual's personal background, lack of confidence in their ability to be successful, or self-doubt.

Alshehry (2016) used this framework to identify the motivations and barriers that influence nurses in Saudi Arabia to pursue doctoral qualifications. While Alshehry's study produced lists of factors within that context, his study was not specific to students going through an application process; therefore, he did not investigate a correlation between motivation and barriers. De Oliveira Pires (2009) also used the framework. Her retrospective study involved a target population of 145 participants who had already completed postgraduate degrees, but the study did not investigate linkages between the motivations for future study and the barriers faced in the past.

In investigating the barriers to enrolment after acceptance, I found very little research even at the undergraduate level. Even though Chapman (1986) acknowledged a lack of access to supporting data, he reasonably suggested that a barrier to enrolment could be situational involving a change of financial circumstances, or some other unexpected event. In a qualitative study about the admissions experience with six participants who chose not to enrol, Hudnett (2015), found deficiencies in communication with, and lack of clear financial aid information from the college in the study (institutional).

From this literature and from professional experience, I created a survey with lists of potential motivators and a list of potential barriers to enrolment, and in Chapter 4, I use exploratory factor analysis and regression analysis to examine the responses provided by participants.

2.2.4 Idiosyncrasies of small island developing states

One notable omission in many of the prior studies referenced is that most reflect findings obtained within either the developed world, or the larger developing world, and none have considered the existence of possible peculiarities of small island developing states. From personal knowledge, small island developing states have idiosyncrasies not easily understood by people outside of the environment. Easterly and Kraay (2000) provide an example of this lack of understanding, strangely suggesting that small states have perhaps received 'excessive attention from the literature' and that in fact, they are no different from large states (ibid., p. 2024).

In reality, in addition to the expected challenges of 'smallness', physical isolation, lack of choice, the reality of globalization, and lack of economies of scale, these states experience serious challenges in administration, education and economic development (Farrugia, 1993; Bacchus, 2008; Mohammed and Gibbs, 2012). These small societies suffer from the influential role of power, a culture of dependence, a lack of willingness of employees to take responsibility, and deference to authority (Punnett, Dick-Forde and Robinson, 2006). In these societies, it is understandably difficult to keep education and professional information private, so progress and status are easily and often,

tracked and measured. Even late in life, locals remain associated with the secondary school they attended and the academic honours they did or did not receive. I found no specific motivators or barriers under these headings in existing postgraduate enrolment literature, and so in the survey, I made room to collect data via open comment fields, with the findings included in the chapters following.

2.3 Research question

There is very little literature related to how a candidate makes the ultimate enrolment decision after acceptance into a postgraduate programme. I have shown that there is an academic case, as well as a practical case, for gaining a better understanding of what makes a candidate decide not to show up after accepting an offer. The research question formulated to guide the research to address a part of the gap in knowledge in this area is:

What is the relationship between students' motivation to apply to postgraduate study, their demographic profile, and their decision to enrol in a postgraduate programme after receiving an offer of admission?

I approached the research question through three sub-questions:

1. What is the motivation of postgraduate applicants who accept places offered?
2. What is the motivation of postgraduate applicants who do not proceed to enrol after receiving an offer of admission?
3. Is there a difference in motivation or demographic profile between applicants who formally reject an offer of admission, and those who informally reject an offer of admission by becoming no-shows?

2.4 Summary

This chapter presented the conceptual framework and a review of literature related to the higher education choice, motivation and barriers to enrolment. It showed that a great deal of data gathering and analysis has been undertaken over the years to provide an understanding of the aspirations, motivation and decision-making of incoming undergraduate students, with less research found related to the postgraduate enrolment decision. The chapter identified the gap in the literature related to enrolment decision of postgraduate students and presented the research question broken down into three sub-questions. In the next chapter, I will present and justify my research paradigm/philosophical framework, explain the research methodology and detail the methods I used to address the research question.

3. Research Paradigm, Methodology and Methods

3.1 Introduction

This chapter explains the research paradigm, and the methodology and methods¹⁷ I employed in seeking to understand why an accepted postgraduate student would choose not to enrol, and investigating whether or not this occurrence relates to demographics and/or the initial motivation to apply. Any relationship found would add to the theoretical knowledge of the field, and provide a basis for institutions to review enrolment strategies. The knowledge could also provide useful information for student support systems, noting that a student who met the no-show 'profile' but continued through to register could face challenges after enrolment.

3.2 Research paradigm

Bryman (1988, p. 4 as cited in Bryman, 2012, p. 630) defines a paradigm as 'a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done, [and] how results should be interpreted'. There are many different types of paradigm, but the ones which are relevant here are research paradigms, also known as philosophical frameworks that guide disciplined research. Guba (1990, p. 18) characterises research paradigms by responses to three questions. These questions are: what is the nature of the 'knowable'/'reality'; what is the relationship between the researcher and the 'knowable'; and what approach should a researcher adopt to acquire knowledge? The knowledge sought in this study is whether there is a connection between two variables: *non-enrolment*, which one can measure objectively because a person has either enrolled or has not; and *motivation*, which is a constructed, intangible concept.

¹⁷ There are conflicting definitions in the literature about the use of these research terms. Herein I have adopted the following meanings: *research paradigm* to include ontological and epistemological assumptions, *research methodology* to include research approach and research design; and *research methods* to include techniques for collecting and analysing the data.

I come from a computer science background in an era where the approach to that field traditionally had been positivist and functionalist, with measurable, objective, technical interconnected parts working together to maintain balance. If I could clearly define and measure all of the variables in the current study, that way of thinking may have led me to a positivist, empirical approach to collect, analyse and report data. There would have been an objective perspective involving observable facts gathered from responses to closed, structured questions in a survey. However, positivism finds no necessity or basis for venturing beyond what one can see, experience and objectively convert into variables for measurement (Lee, 1991, p. 343). This was problematic because, as stated before, while one can objectively collect demographic information and the final enrolment decision, motivation is a construct; therefore, I had to have room for some exploration and interpretation of data. In addition, I created the research question which explores the possible existence of a relationship between the two variables mentioned above, from my personal experience and my knowledge of the postgraduate administration process. Further to this, I fully appreciate that there may be alternative methods and ways of going about this research that might reach other conclusions. Therefore, pure positivism could not have been an appropriate stance for me to undertake this research.

At the other end of the philosophical scale sits interpretivism, stating that reality results from an interpretation of the meanings and actions of actors (ibid., p. 347). An interpretivist philosophy contends that one constructs reality either individually or socially, with interpretivism lending itself more to subjectivity than generalizability. Such a purely qualitative type of approach would require me to focus on meanings assigned by respondents, and I did not believe this was the appropriate methodology.

For me to adopt a philosophical framework, it had to reside somewhere in between the two, and able to support the investigation of the exploratory hypothesis of a correlation between the barrier to non-enrolment, and the motivation to apply. I discovered that my way of thinking fit a critical realist approach. Critical Realism is a term developed by Roy Bhaskar in *A Realist Theory of Science* (2013 *originally*

published in 1975) to describe a way of interfacing the positions of positivism and interpretivism. Bhaskar explains that critical realism combines realist ontology (what constitutes knowledge) with interpretive epistemology (how we seek that knowledge). Some advocates of this approach argue that it results in a deeper level of understanding of a research problem (McEvoy and Richards, 2006). Bhaskar's way of explaining the critical realist approach is that reality is intransitive in that it exists independent of our knowledge and theories about it, but that humans interpret this reality in biased and limited ways. O'Gorman and MacIntosh (2014, p. 61) break down the term 'Critical Realism' and explain it thus – '*realist* in believing in an external reality but *critical* of our ability to access and measure it'.

Critical realism guides a researcher to ask not just *what* happened, or what *caused* the event to occur, but in effect, what could be going on beneath the surface, and really *behind* the event (Danermark, Ekstrom and Jakobsen, 2005, p. 20). To get to this deeper understanding, Bhaskar (2013) identifies three different but interconnected domains for analysing a phenomenon. These domains are (1) an *empirical* domain that encompasses what can be measured by experience (or observation) rather than theory or pure logic, (2) an *actual* domain encompassing events that are actually happening to cause the phenomenon, and (3) a *real* domain comprising the many mechanisms, concurrently active, that sit behind the phenomenon itself, which are often 'out of phase with the actual patterns of events' (ibid., p. 2). In this sense, the word 'real' means 'to have an effect or make a difference' (Fleetwood and Ackroyd, 2004, p. 107). Table 7 below reproduced from Bhaskar's Realist Theory of Science (p. 2) illustrates these concepts.

Table 7 Critical Realist concepts

	Domain of Real	Domain of Actual	Domain of Empirical
Mechanisms	✓		
Events	✓	✓	
Experiences	✓	✓	✓

Source Bhaskar Table 0.1

Bhaskar refers to this as nature, and our knowledge of nature as being 'stratified' (ibid., p. 91), suggesting that there is more to a phenomenon than what we experience, and that causes for any skewing lie hidden in a stratum of mechanisms that are not obvious. This critical realist approach gives a researcher the flexibility to step back from the empirical and ask what could have been the reality experienced for the actual event to have happened as it did. That is, to explore theories, present an exploratory hypothesis, collect and test the data to uncover the existence of relationships, while accepting that knowledge itself is fallible (ibid., p. 127).

Researchers are adopting critical realism to guide research in areas, some traditionally approached from a positivist perspective, reconsidering these to acknowledge the impact of social systems. The field of Information Systems is one in which researchers are acknowledging that technology does not exist in a vacuum, but is heavily influenced by those people who use, manage and ultimately determine the success or failure of such systems. Studies include one seeking to understand fast broadband adoption decisions of communities in rural Australia finding a level of social complexity in the way individuals make information systems decisions (Dobson, Jackson and Gengatharen, 2013), and another investigating technology-mediated organizational change and its relationship to performance management systems (Allen et al., 2013). Other research that shows areas in which the critical realist approach has been helpful include: seeking an understanding of the impact of the social context as a driving force surrounding greening in small and medium-sized firms in South Africa (Jeppesen, 2005); explaining how and why social capital changes in an entrepreneurial network relationship (Bowey and Easton, 2003); exploring the capacity for an entrepreneur to create or shape institutions (Leca and Naccache, 2006); seeking processes and structures that underpin the emergence of power in the business relationship between two companies following a financial crisis in one of the companies (Ryan et al., 2009); and, assessing the ability of critical realism to provide a workable ontology of organisation and management areas (Fleetwood and Ackroyd, 2004).

The *empirical* domain (or layer) in this study focuses on the characteristics of the applicants and the outcome of the decision-making process. The *actual* domain consists of the events which occur independently of whether or not one can experience these events (for example tangible barriers), while the *real* domain consists of mechanisms that one cannot see, experience or detect directly but which produce the actual events (for example the psychological aspects underpinning the motivation to apply). Thus, a critical realist approach permits the collection of empirical data to identify the applicants, the collection of subjective data to identify and rate the motivation to apply and barriers to non-enrolment, and the use of exploratory factor and regression analyses to seek an understanding of one related to the other.

In the next section, I will explain the research approach, research design, type and source of data identified as necessary for the study, how I collected the data, how I selected participants for the study, assumptions made, limitations realised, and challenges experienced in the process.

3.3 Research methodology

3.3.1 Research approach

The question I faced about the approach to this research was what approach would provide a credible framework within which to seek and report knowledge that would be acceptable to the relevant community of scholars. In this Klein and Myers (1999) provided guidance, warning researchers to let go of biases from prior experience and to adopt a 'value-free position' (p. 76) when selecting an approach, reminding them to select an approach as a function of the purpose of the study. Danermark et al. (2005, p. 27) reiterate that researchers should treat methods, object, and purpose together and that 'methods must suit the object of the investigation as well as the purpose of it'.

The American philosopher Charles Peirce (1839 - 1914) identified three basic types of approach to reasoning – *deduction*, *induction*, and what he coined *abduction* (and to

which he referred in later works as *retroduction*). Peirce (1965 1.65) defines these terms thus:

‘Deduction proves that something must be; Induction shows that something actually is operative; Abduction merely suggests that something may be.’

The deductive process is an analytical ‘mode of reasoning’ (ibid., 1.66) that gives no guidance about how a researcher can gain knowledge and ‘says nothing new about reality’ (Danermark, Ekstrom and Jakobsen, 2005, p. 89). Inductive reasoning adopts a ‘conclusion as approximate’ stance (Peirce, 1965 1.67) starting with a number of observations and attempting to draw conclusions to create a general law. Abduction is a presumptive process entailing the provisional adoption of a hypothesis which seems reasonable, then trying out this hypothesis leading to consequences observed (ibid., 4.541). This creative process, Peirce asserts, is the ‘only logical operation which can introduce any new ideas’ (ibid., 5.171).

The observations, in this case, have come from my experience of years of involvement in postgraduate administration which provided the ideas for two sets of exploratory factor analysis. Thus, the process started with the hope that the benefit of my knowledge in the area of research, guided by imagination, would render my exploratory hypothesis to explain the facts ‘not altogether hopeless’ (Peirce, 1965 1.121), and result in both an explanation for the observation and some new knowledge. The facts are that in a situation where there is no competition locally for the range of face-to-face postgraduate programmes Cave Hill provides, where programme structure, programme costs, as well as institutional practices and policies appear well-documented and easily available ahead of application, there is an unacceptably high incidence of postgraduate no-shows. The assumption could be that barriers to enrolment are situational (for example, funds not available at the time), or institutional (for example inflexible timetable). However, my exploratory hypothesis is that postgraduate applicants driven by extrinsic externally-driven motivators are the

ones who are more likely to *not* enrol, and that admitted applicants who do not enrol are more likely to cite barriers that one cannot challenge.

3.3.2 Research design

A research design is an overall plan of action for the execution of a study. The end game requires that I follow ethical, reliable and valid steps: collecting possible motivators and barriers; gathering and categorising initial motivation from all who received offers of admission; gathering and categorising barriers from all who did not show up including those that did not accept the offer; and, analysing them all. The critical realist approach was very helpful in informing the design of the study because critical realism does not commit to a single type of research, and in fact, its stratified ontology 'endorses a variety of quantitative and qualitative methods' (Zachariadis, Scott and Barrett, 2013, p. 10). The process started with a review of prior studies to create a suitable list of questions and continued with the longitudinal collection of primary data throughout the application and registration periods via online surveys within closed, self-selecting populations.

3.3.2.1 Analysis of prior studies

The literature in this field more often reported motivation according to the type of degree, and reflected students already enrolled rather than candidates at the pre-enrolment stage. Thus, to extract motivating factors, that research often used retrospective studies undertaken either through qualitative studies with small focus groups or interviews, or quantitative studies analysing larger-scale primary or secondary datasets. In a number of studies I found the motivation of postgraduate students in taught master programmes similar to motivations of professional doctorate students and related to internally-driven and externally-driven extrinsic needs such as career advancement (Delaney, 1999; Jablonski, 2001; Donaldson and McNicholas, 2004; Marks and Edgington, 2006; de Oliveira Pires, 2009; Liu, 2010; Park and Wells, 2010; Morgan, 2013; Mowjee, 2013), and career change (Delaney, 1999;

Jablonski, 2001; Donaldson and McNicholas, 2004; Marks and Edgington, 2006; Hawkes, 2016).

Both taught master and professional doctorate students also reported intrinsic needs such as personal fulfilment (Delaney, 1999; Jablonski, 2001; Leonard, 2005; Wellington and Sikes, 2006); Intellectual challenge (Jablonski, 2001; Wellington and Sikes, 2006; de Oliveira Pires, 2009; Mowjee, 2013); intrinsic goals (Jablonski, 2001; Marks and Edgington, 2006; Liu, 2010; Park and Wells, 2010); and a desire to gain further knowledge of a particular subject (Leonard, 2005; Marks and Edgington, 2006; Wellington and Sikes, 2006; de Oliveira Pires, 2009; Morgan, 2013; Guerin, 2015).

In the literature, students enrolled in professional doctorate programmes reported some externally-driven extrinsic motivators not seen in the taught master students. These motivators include wanting to prove abilities to others (Jablonski, 2001), the nudge of an employer (Hawkes, 2016), job security (Wellington and Sikes, 2006) and a desire to address 'problems of practice' (Hawkes, 2016). Prior research also shows research candidates more likely to identify motivators of wanting to excel academically (Brailsford, 2010; Hinkle et al., 2014), contribute to the field in which they have a genuine interest (Brailsford, 2010; Tarvid, 2014; Guerin, 2015), to be a leader in the field (Hinkle et al., 2014), to prove themselves and confirm a sense of positive identity (Hinkle et al., 2014), to achieve something new (Tarvid, 2014), to continue an enjoyable learning experience (Tarvid, 2014), and a desire to belong to the academic community (de Oliveira Pires, 2009; Hinkle et al., 2014).

Similarly, I reviewed studies on barriers to enrolment but, apart from the study that identified institutional challenges related to poor communication from an institution (Hudnett, 2015) I found little research related to enrolment decisions. Thus, I relied on a subset of the dispositional, situational and institutional barriers to adult learning identified by Cross (1981) that I considered relevant. Therefore, while prior research provided a few factors, it could not provide an insight into the mind-set of those applicants who did not enrol as expected and never became students.

3.3.2.2 Primary data collection

As the campus' application process is online and applicants must provide a valid email address as part of the process, I decided that distributing self-administered surveys online was the most suitable method of reaching the target population to collect the primary data. A survey comprises a predetermined set of closed and/or open-ended questions designed to produce generalizable statistics (Fowler, 2009, p. 8). Surveys provide a standardized format for data collection with each respondent presented with the same question in the same order. Once designed, the online version of a survey is easy to create, administer, and can reach a large number of people immediately, regardless of physical location (Fan and Yan, 2010). Researchers can easily identify and follow-up with non-responders in a direct and targeted manner. Miller (2017) notes declining response rates to surveys as the public reaction evolves, so I took steps to reduce non-response such as: including information about the study in the invitation email, including a personalized reminder, providing an email address in case a respondent needed assistance or had a query, ordering the questions so that the more complex ones were not presented first (Fan and Yan, 2010, p. 132), and keeping the length close to the ideal time of 10 minutes (Revilla and Ochoa, 2017). I noted, but could not avoid Lambert and Miller's (2015) caution about the tendency of respondents who use smartphones to complete surveys to *not* adequately complete open-ended questions.

According to Fowler (2009, p. 11), the two main goals of good survey design are to measure error that is intrinsic to any survey and to minimize errors in data collection. For a survey to produce valid information, it is essential that the respondents adequately represent the entire population and that the responses provide accurate representations of the characteristics the researcher is measuring. This requires clearly identifying the target population, deciding on the use of a sample (including the appropriate size and method of selecting the sample), thoughtfully designing the questions (ensuring they are reliable, readable, and not ambiguous or vague), and carefully deciding a plan for collecting the data (Fowler, 2009).

Target population

A sample is a subset of the population selected as representative because it is normally prohibitive to access all members of the population (Ritter and Sue, 2007). Because the postgraduate programme at the campus is relatively small, and the pool of qualified applicants forms an accessible closed population with manageable numbers, I selected the entire cohort of admitted postgraduate students for a single semester, just under 600 people.

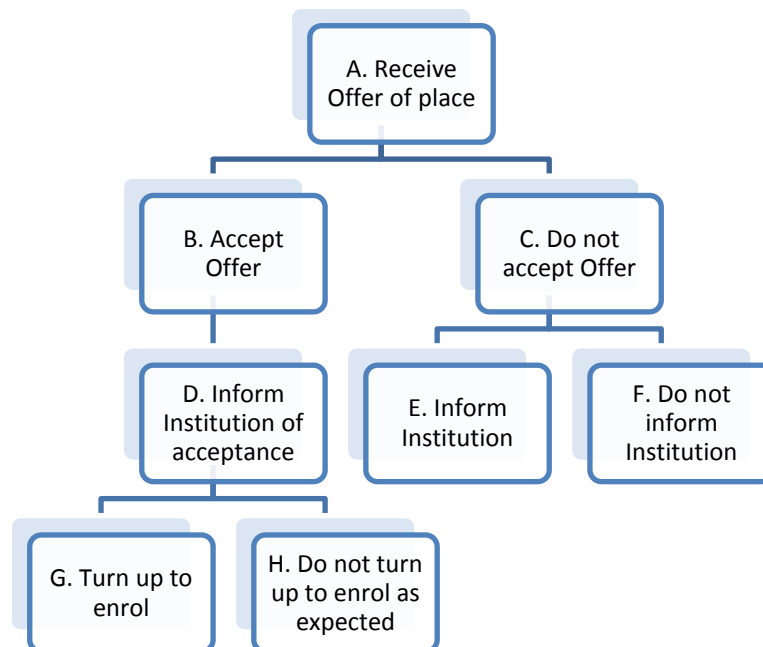


Figure 4 Options for student after acceptance

Figure 4 shows the options available to an accepted applicant. In the first data collection phase, I selected all candidates (A) as the target population. This gave the opportunity to gather data from the qualified applicants made an offer, including those who accept, but who ultimately become ‘no-shows’ (H). I selected this subset of the total body of postgraduate applicants receiving offers of admission rather than the total population of applicants, because a review of application datasets over a 10-year period revealed an applicant pool that included *unqualified* people as well as a number of incomplete applications that remained un-processed because of un-submitted supporting documentation.

I deliberately took the decision not to extract a sample by limiting the population to a discipline, level of degree, or randomly selected group because some programmes accept a maximum of 20 new participants, and pre-determining which particular programmes in any one year would attract a sufficient number of qualified applicants was simply not possible – even after examining records of prior years. While there was no guarantee that every one of the population would participate in the survey, the selection of all eligible candidates in the target population reduced the possibility of sampling error, potential errors of bias in selection (Fowler, 2009) and coverage error (Dillman, 2011). In terms of errors associated with survey responses, the design of the majority of the questions in each survey enabled me to gather clearly defined responses to objective questions.

Survey design process

Before starting on the design, I sought and received approval for the research and permission to access application data from the Cave Hill Campus Registrar. After receipt of that approval, and generally guided by Fowler (2009), I took the following steps to design and fine-tune the instrument:

- (1) I held a discussion of the aim of the project with work colleagues;
- (2) I reviewed prior studies and questionnaires, and prepared a draft set of questions;
- (3) I reviewed the draft questions for clarity, readability, and relevance;
- (4) To get further comments on the level of understanding I circulated the draft questions to colleagues;
- (5) I designed the survey using Qualtrics software and pre-tested it with a team inclusive of my supervisors; and
- (6) Based on comments received, I adjusted the wording and order of questions, retesting as many times as necessary to reach a level of comfort in the readability, relevance, appropriateness, and length of time to complete.

In preparing the questions I paid particular attention to some advice from Harris and Brown (2010, p. 2) who highlighted the fact that questionnaires often used to gather quantitative data can have a downside of confusion caused by poor design, misinterpretation, and poor rates of response. Respondents may select options because they believe they should, they could miss important factors altogether, the wording of questions can inadvertently lead respondents to particular responses, and responses may not present the entire picture of the research problem (ibid., p. 2).

I submitted the final list of questions to the Institutional Review Board (IRB) at the Cave Hill Campus as required. On receipt of IRB approval, I distributed the first survey online to the target population. Each participant needed to specifically select 'Yes' to an initial question about participation before seeing the survey. The first survey collected basic demographic, academic and employment data, the motivation for applying for entry to a higher degree programme, and the intent of the applicant in terms of accepting the place offered. The survey also included a section on barriers to enrolment, only displayed to respondents indicating that they intended to reject the offer outright. The second survey consisted of the section on barriers to enrolment, and I subsequently issued this to any respondent who submitted a formal rejection of the offer at any time after completion of the original questionnaire.

This two-step longitudinal cohort design permitted me to establish contact with all accepted applicants early in the decision process, and to set up agreements to communicate with them later. Through this early approach, I hoped to gather motivation at a point in the process when it was current. However, I acknowledge that it is possible that respondents could experience some feelings of defensiveness or disquiet when considering repeated contact with me, as a member of the senior administrative staff. Any such discomfort may have dissuaded respondents from participating in the research or continuing in the research once they decided not to enrol. To attempt to mitigate any misgivings, I accompanied both surveys with email messages which emphasised the academic contribution anticipated from the study, gave the assurance that responses would never influence any university decisions at

any time, and reminded respondents that they could opt-out or stop at any time. Further to this, I treated incomplete surveys as if the respondent had opted out and did not contact such candidates again. I worded all approaches to the applicant in a non-judgmental manner, so as not to appear to force an applicant to make a hasty decision or change the applicant's mind, but to find out as dispassionately as possible what motivated them to apply and what influenced the decision-making.

3.4 Research methods

3.4.1 Type of data collected

As previously outlined, there was technically only one questionnaire, but the research design required the collection of sections of data at different times of each applicant's acceptance process. The original questionnaire issued to all accepted students contained all of the questions with some questions only made visible depending on the respondent's acceptance decision at the time. Appendices II and III comprise the main survey questionnaire and accompanying email messages.

3.4.1.1 Original survey (Group I)

The main survey had 19 questions structured in four sections.

Section 1 – Information about the programme

The first section comprised three questions gathering information on the programme for which the applicant received an offer. In particular, I asked respondents about the type of programme for which they received the offer (postgraduate diploma, taught master, research master, research or professional doctoral programme), the subject area, and the intended mode of study (full-time or part-time). These programme-related responses were some of the independent variables used in the motivation and non-enrolment analyses. I asked all respondents to provide this information.

Section 2 – Motivation to apply

The survey presented respondents with 20 statements showing motivators identified in previous studies. I asked respondents to consider and rate their agreement with each motivator on a 5-point Likert-type scale with the options: *Strongly disagree*, *Disagree*, *Neither agree nor disagree*, *Agree*, *Strongly agree*. I used a Likert-type scale so respondents would provide a measure of the influence rather than simply stating if a particular factor provided an influence at all. There are differences of opinion about the optimal number of points of a Likert-type scale. I took guidance in the selection from Croasmun and Ostrom (2011) who advised about selecting an odd number to accommodate people who were neutral about a particular item, and thus reducing response bias. I decided on a scale with 5 points instead of 7 or 9, because increasing the number of options would have created the challenge of articulating additional distinctive categories (Dawes, 2008). However, I recognised that some of the factors in the survey would not have been applicable at all; therefore, I included a *Not applicable* option for each one, intended to avoid situations where respondents felt forced to make the choice: *Neither agree nor disagree*. I invited respondents to contribute detail on up to three additional motivators, ranked on the same 5-point scale that influenced their decision to apply. I asked all of the respondents to provide this information.

Section 3 – Enrolment Decision

Intent

I asked respondents whether they had yet made a decision on the offer. If they had not made a decision, I asked about the likelihood of acceptance. The survey presented candidates who indicated that they intended to reject the offer with a question on Barriers to Enrolment. The survey then directed candidates who had accepted the offer or were yet unsure of the decision, to the sections on demographics and the consent for further follow-up. I required all of the respondents to complete this section.

Barriers to enrolment

The survey presented candidates who indicated that they intended to reject the offer with factors that may have influenced that decision. I presented respondents with 13 possible barriers and asked them to rate their agreement with the influence of each barrier on a 5-point Likert-type scale. For the reason mentioned earlier, each potential barrier included a *Not applicable* option, and I invited respondents to add detail on up to three additional influential barriers. Those respondents, who had already accepted, intended to accept or who were still unsure of a decision, did not see this section.

Section 4 – Demographics

The survey asked all respondents to provide information on gender, age, nationality, highest level of qualification, current educational status and employment status. While it is very uncommon in the Caribbean for people to be open about this, I included an option for respondents to identify as other than male or female. The UWI does not gather information on race or ethnicity from staff or students; therefore, I added no questions in these categories. These academic and demographic items were the additional independent variables used to analyse motivation and non-enrolment. I asked every respondent to provide this information.

Finally, I asked all respondents to consent to participate in a follow-up survey depending on their eventual registration status, and for an alternate email address where relevant. The survey provided one final comment field and invited respondents to enter any further comment on any aspect of the survey.

3.4.1.2 Follow-up survey to respondents who were previously undecided (Group II)

The follow-up survey consisted of one question intended to gather the barriers that influenced a subsequent decision to reject the offer. This question was identical to Section 3 in the main survey and again included the option to add up to three rated factors and make comments. Even though these respondents had previously agreed to

further contact, in the covering email I still gave them the option to opt-out of this follow-up survey.

3.4.1.3 Follow-up survey to respondents who became no-shows (Group III)

Group III comprised prior respondents who did not enrol after accepting the offer. Having collected contact information and consent from successful applicants before most had made a decision I knew the identity of each eventual no-show. This placed me in a good position to plan for Skype interviews with each person after the close of registration to gather barriers and concerns from all of them. However, I felt compelled to adjust this original plan for Skype interviews for a number of reasons. During the months of August and September, while the campus was grappling with several practical and policy issues related to the new 2018 tuition fee policy, the campus experienced an unusually high level of disruptive technical challenges. Therefore, the period from August to October turned out to be very unsettling for new and returning students, and I realised that contacting no-shows directly may have led to administrative and policy-type queries that I could not address, possibly even overshadowing the research exercise. In addition, after the reality of six months of collecting, checking, monitoring, cleaning, and coding data, I had to acknowledge that introducing the volume of qualitative data possible from interviews could prove difficult for me, as a single researcher, to analyse in a limited time-frame. Therefore, I discarded this approach of a follow-up interview with no-shows, and sent the no-shows the same follow-up survey as people in Group II. As before, while all respondents had agreed to further contact, I included the option to opt-out of this additional survey.

3.4.1.4 Original survey re-issued to non-respondents who did not enrol (Group IV)

In order to be able to determine whether admitted applicants who rejected the offer could be distinguishable from no-shows, I made a further attempt to get as many responses as possible from applicants whose registration status showed that they did not enrol. To do this, I re-sent the original questionnaire to all unregistered non-

respondents with a slightly different covering letter. As the stage of the application process was different, the questions on *Intent* in Section 3 were no longer relevant and were not included. The survey presented the remaining sections to non-respondents who did not previously opt-out.

3.4.2 Data collection process

I originally scheduled the first phase of survey distribution to start in February 2018. However, I had to delay the start of data collection to the first week in April 2018 because I received ethics approval from both the University of Bath and the Cave Hill Campus, at the end of March 2018. Every Friday afternoon from the start of April to the end of September, I downloaded admissions data from the campus' student information system into an Excel workbook, and checked through for decisions time-stamped since the previous download. Specifically, I accessed: the name of the applicant, the ID assigned to the applicant by the institution, the application number, the date of application, the programme related to the offer made to the applicant, the type of offer, the date of the offer, the decision of the applicant on the offer, and the date of the decision of the applicant.

With regard to the process of downloading relevant, reliable, and valid data, I am a former Registrar of the postgraduate section at the Cave Hill Campus and have a background in systems analysis, design, computer programming, and database management. I have extensive institutional knowledge, am very familiar with all current postgraduate regulations and programmes, have knowledge of the meaning of the data stored in the institution's student administration system, understand how the postgraduate section processes data, and possess the expertise to scrutinise, filter, clean and cross-reference the data. Therefore, I am qualified to download, check and clean the admissions dataset to create a weekly contact list with newly admitted applicants (Group I).

Before I could add members to the survey population every week, I had to meticulously scrutinise the data I downloaded. This scrutinising began by confirming each person to

be a valid member of the survey population considering relevant admissions policies of the campus. The first related policy is that the Cave Hill campus permits postgraduate applicants to submit multiple online applications, rather than one application with multiple options. The campus also permits multiple offers to individual postgraduate applicants. Students who wish to re-enter a programme after a period of withdrawal must complete the same online application form as prospective students. Finally, a candidate previously registered as a student of any campus of the university receives the student ID number previously allocated, with new student ID numbers reserved for completely new applicants. During the normal processing of applications the postgraduate administrative staff members routinely identify, correct and update anomalies in the student information database.

Because of these administrative policies, I had to carefully check every data download to identify for exclusion, any applicant receiving an offer to a second (or other) programme who would be part of a previous survey distribution, as well as to identify prior students seeking re-entry as those candidates are not included in the study. I also had to cross-reference applications in every download to applications in previous downloads to identify situations with student IDs corrected through routine administrative maintenance, and make those changes in my dataset. Because I was so intimately involved with the data, in some cases, I became aware of anomalies *before* the members of postgraduate administrative staff and brought all of the issues I found to the departmental administrative assistant for immediate attention.

I noted all acceptance decisions taken during each week and tagged that data by a week number starting at one representing the week ending April 6, 2018. Seven to ten days after the campus sent offers of admission, I sent all of the new admits an email with an introduction to the study asking for their voluntary participation. The purpose of this time window was to give respondents the opportunity to receive the offer and review the associated terms and conditions. I immediately flagged the application of any person who opted out, and any person who started but did not complete the first questionnaire. I made no further contact with these applicants. I

downloaded the completed questionnaires from Qualtrics once a week to identify any additional opt-outs as well as any respondents who completed the survey, but who indicated therein an unwillingness to take part in any follow-up exercise. I also flagged these respondents for no further contact.

I programmed the survey with a seven-day reminder for non-respondents who had not opted out. Respondents who were already sure that they would reject the offer automatically saw the section on barriers to enrolment. Other respondents did not see this section. I asked any respondent who subsequently rejected the offer (Group II), and who had given consent for follow-up contact, to complete the second questionnaire on barriers to enrolment.

At the end of September 2018, respondents originally reporting the intent to enrol received the second questionnaire on barriers once registration records showed that they did not enrol as expected (Group III). Although I worded the email slightly differently to that sent to Group II, the questionnaire to Group III was identical, aimed at gathering data on what prevented the student from enrolling. At the same time in September, I re-sent the original questionnaire to all non-responders who had directly or indirectly rejected the offers made (Group IV). A differently worded cover letter accompanied the email in the hope that some of the original non-respondent non-registrants might be willing to engage with the study once the time to accept or enrol had passed. Again, I advised the applicants that participation in the research was strictly voluntary and that they could ignore the email if they were unwilling to contribute. This contact with Groups III and IV happened on September 27, 2018.

In summary, I approached accepted applicants in the following way:

Group I: I contacted respondents who accepted and enrolled with the first questionnaire either once or twice (including the 7-day reminder to unfinished respondents);

- Group II: I contacted respondents who accepted but did not enrol either once or twice with the first survey (including the 7-day reminder to unfinished respondents), and with the follow-up questionnaire (again with a 7-day reminder) if I had permission for the follow-up;
- Group III: I contacted non-respondents who enrolled twice with the original questionnaire (because of the 7-day programmed reminder);
- Group IV: I also contacted original non-respondents who did not enrol with the original questionnaire (including the 7-day programmed reminder), and, for a third time during the final collection effort in September.

I sent the original email invitation to 560 participants. There were 198 respondents, including one person who opted out and 17 people in total who did not complete the survey in its entirety, leaving 181 respondents who completed all of the questions. Of the 181 respondents, 23 declined to participate in the follow-up survey and I did not contact these participants again. Enrolment records in mid-October showed that, in total, 142 of the respondents accepted the places offered, and 39 did not accept the places offered. Of the 142 respondents who accepted places, 96 enrolled and 46 became no-shows. Among the 85 respondents who either did not accept places or became no-shows, 46 completed the survey on barriers to enrolment. The number of respondents was lower than hoped for, but the previously explained challenges experienced by the institution through August and September could conceivably have affected the enrolment decision of applicants, as well as their willingness to participate in, or continue with, the study. Another consideration is that candidates may not have wanted to submit reasons for not showing up through embarrassment, or perhaps the no-shows did not want to record anything that they believed could affect applications in future years.

3.4.3 Data analysis

3.4.3.1 *Inspection, cleaning, sorting, coding of data*

As stated earlier, I downloaded survey responses regularly from Qualtrics into Excel where I inspected, cleaned, and coded the data gathered. I inspected the data for typographical and other obvious errors, for example, a date of birth that would calculate to a candidate less than 18 years of age, a previous degree completion date that was inconsistent with the date of birth, a completion date which had already passed but an option selected indicating that respondent was still a student. I referred all such inconsistencies to the postgraduate administrative section for clarification and made all resultant corrections in the Excel dataset. At the close of the data collection period, I added a number of variables to the dataset to facilitate analysis. These new variables included *Unique person identifier*, *Accepted* indicator, *Enrolled* indicator, *NoShow* indicator, *Age range*, and *Range of years since the last qualification*. For each respondent, I created a Unique Person identifier using a combination of the download week and a sequential number. I created age ranges that mirrored those used by the campus in published reports, and ranges of five-year bands for time since the last qualification. Then, I used the enrolment information downloaded from the campus' registration database at the end of the enrolment period to complete the new *Accepted*, *Enrolled*, and *NoShow* indicator fields, and afterward, merged in the barrier responses from the second and third surveys.

Having successfully combined all of the data, I adjusted the names of remaining variables in the active dataset to brief but explanatory versions that described the related questions. After re-naming the variables appropriately, I exported the dataset from Microsoft Excel into SPSS. Next, I assigned label names to each variable in SPSS, converted the categorical data to quantitative categorical data to facilitate processing and assigned numeric values to all other nominal data, for example, I coded *Enrolment status*: 0=*Not Enrolled*, and 1=*Enrolled*. Although I could have coded the nominal binary variables with any values, using '0' and '1' meant that the mean of the variable

would equal the proportion of cases with the value '1'; therefore, I could interpret the mean as a probability.

3.4.3.2 *Missing values*

To make it possible to statistically process data from the Likert-type questions, I assigned quasi-continuous values to the responses as follows: 1=*Strongly disagree*, 2=*Disagree*, 3=*Neither agree nor disagree*, 4=*Agree*, and 5=*Strongly agree*. As stated earlier, I had introduced the sixth option of *Not applicable*, expecting that respondents would use this in cases where the factor could not apply at all in their individual context. For example, the question 'to set an example to my children' was not applicable to the respondents who did not have children.

However, it quickly became clear from reviewing responses to some questions, that I had not made the purpose of the *Not applicable* option clear enough on the form, and respondents selected this option instead of the neutral option: *Neither agree nor disagree*. As an example, some respondents who indicated that they were in full-time employment had selected the *Not applicable* option in response to the motivator "The advice of my employer". As another example, some respondents had selected *Not applicable* in response to the motivator "The encouragement of a former academic tutor/supervisor". In each case, the expectation was that the respondent would have selected the neutral option, as in both situations, the motivator was technically applicable. When converting Likert-type data to scaled values for analysis, one can treat *Not applicable* responses in a manner similar to missing data. However, if some respondents *did* select *Not applicable* instead of the neutral option, as I realised was the case here, the survey would register more missing values than anticipated. Therefore, I had to make a decision on the best way to treat situations where respondents selected this option.

There are suggestions in the literature on how to treat missing data for purposes of analysis, for example (Little and Rubin, 2014). These suggestions include – *listwise deletion* with the entire record containing any missing item eliminated from the

analysis, *pairwise deletion* with all records with missing data for a particular set of variables eliminated, or imputation of a mean for the missing values (McNeish, 2017). However, deletion of cases would have created a different set of challenges by reducing the already small dataset of 198 respondents making an effective factor analysis unlikely, and I did not consider the imputation of the series mean ideal because for, some of the factors, the percentage of *Not applicable* values was higher than the 5% maximum suggested (Schafer, 1999). Therefore, as the purpose of the motivation and barrier scales was to differentiate between a respondent's negative and positive feelings about particular factors and the relative strength of those feelings, I treated the responses *Neither agree nor disagree* and *Not applicable* as interchangeable and adjusted the coding accordingly.

3.4.3.3 Access to, safety and storage of data

To manage safety, access, and security I encrypted all data and stored them on my personal laptop with a backup copy (also encrypted) in cloud storage. During the data collection phase, I backed up data to these locations every time I updated the dataset. I will not share the final dataset publicly, and only my supervisors will have access. I will maintain all of the data for 10 years after the end of the project as recommended by the University of Bath Data Policy. The data will be privately archived after the end of the project and registered with the University of Bath as described in the Research Data Policy section 10.

It was necessary to access applicant names and student ID numbers so that I could clean and filter the downloaded data to exclude duplications, re-entrants and reflect the corrections. To maintain the privacy of applicants during this process I assigned a new identifier to each person and this new identifier is the one associated with the responses in the final dataset. The table that cross-references the actual applicant names and student IDs to the new ID created for the analysis does not form a part of the final dataset. I linked the survey data to final enrolment data in order to merge the enrolment data into the survey dataset but did not store the linkage. This process

preserved the anonymity of respondents and reflected the analysis as conducted in accordance with guidance from relevant research associations and good practice in published research.

3.4.4 Assumptions limitations, and challenges

3.4.4.1 Assumptions

The rationale for the approach of gathering data at the point of the offer was the assumption of candidates still invested in the application process and, as this was an academic rather than an administrative exercise, that they would be more likely to engage honestly with me on a topic with which they were currently involved. I also assumed that the timing of the survey directly after the campus extended an offer would reassure respondents that their survey responses were not connected to the admission decision of the campus, and that participation in the survey could not influence the institution's decision-making process. Other assumptions were that applicants who did not intend to accept would participate because it would give them an opportunity to highlight difficulties they were experiencing, and also, that at the end of the application process, a prior respondent who had made a decision to default on an acceptance would follow through with their commitment to continue with the study and provide some context for their decision.

3.4.4.2 Limitations

I retrieved the dataset from one campus in one application cycle, in a country where there is little competition for face-to-face postgraduate programmes, and a poor economic environment. While other researchers can replicate the study, the result of these analyses may not be representative of other institutions. Another limitation was that, by selecting a single semester, the study unintentionally excluded a few programmes. For example, the Master of Business Administration (MBA) and Doctorate in Business Administration (DBA) programmes at the campus commence in the second semester, so applicants are more likely to submit applications in the last quarter of the

year rather than during the normal data collection period. Therefore, the target population is unlikely to include applicants for the MBA and DBA programmes. Previously I mentioned that the campus accepts research candidates on a more flexible schedule and this flexibility could result in the unintentional exclusion of some of these applicants from the study.

3.4.4.3 Unforeseen challenges

There was a change of government in Barbados in May 2018, and the incoming government announced a reversal of the 2013 tuition fee policy that both required local undergraduate students to pay a percentage of the tuition fees, and removed funding for postgraduate students. This policy came into force during the summer of 2018, more than half-way through my data collection, but there was a lack of clarity during the summer about how the campus was to consider postgraduate students under the new policy. This lack of clarity continued well after the start of the semester. Because the change of policy encouraged a large number of late applications from Barbadian nationals at both postgraduate and undergraduate levels, the campus management took the decision to keep the application process open until August 31 to accommodate as many eligible candidates as possible. This added a layer of complexity during August and September for the administrative staff. Ultimately, the unplanned extension to the application period, the lack of clarity about the relevance of the new tuition fee policy to postgraduate students, the problems that students experienced during the registration period and the possibility that no-shows did not want their reasons known could all have affected the response rates of both of the original and the follow-up surveys. The lack of clarity and problems faced may also have affected the motivations and barriers of late applicants who may also not have wanted to engage with a survey in addition to the rush of trying to prepare for a new semester.

Because of the combination of administrative issues affecting registration that continued into October, I could not download the final registration dataset until October 8, 2018, delaying the start of the data analysis. During the intervening period,

I remained in daily contact with the postgraduate office so I was always aware of the on-going challenges the administrative staff and students were facing during the admissions and registration processes. However, even with all of the contact and my high level of involvement, well into the semester instances emerged of applicants, permitted to attend classes without formally enrolling while the campus resolved outstanding issues with processing acceptances and financial arrangements.

3.5 Ethical considerations

I made sure that the target population was aware of the nature and purpose of research before collecting any data. In all contact email messages, I advised all applicants that participation was voluntary and that I would report any comments respondents made in such a way to keep identities confidential. Therefore, I reviewed all comments captured in the survey and carefully edited out any reference to individual respondents. As I am a member of the organisation, respondents might assume that I have influence in the application process and on-going administrative decisions so I used no incentives. I also made my role in the organization clear to participants in the introductory email before I requested their consent to continue the survey.

I designed the questions so they would not harm participants in any way, and included no questions that could cause stress, loss of self-esteem, legal or employment-related harm. I reviewed the wording of the survey questions to identify and mitigate any potential bias created by subconscious assumptions. For ethical reasons, I will use the raw data only for the purpose for which I gathered them, and I will not share the data with another party apart from my supervisors. I carefully restricted the data I downloaded to exclude personal and educational data because, when submitting an application to the institution, applicants did not provide those data for the purpose of personal research. I used only minimal data, considered relevant to the specific application, and asked applicants who agreed to take part to provide the demographic background necessary for the analysis. To maintain the ethical approval of the Cave

Hill Campus Institutional Research Board, after approval of the instrument I made only cosmetic corrections to clarify wording with the agreement of my supervisors.

Paul Trowler (2011) posed some questions designed to ensure that this type of endogenous research remains ethical, sensitive and robust, and to make sure that it does not damage the reputation of the campus. Included in Trowler's list of cautions (ibid. 4th and 5th pages) are: carefully considering that the design of the research was legitimate in answering the questions, ensuring that all data collected are secure and used in a way that is advantageous but not harmful, and making sure that the resulting report sensitively represents the culture and practices of the organization. Trowler also reminds researchers of the need to seek informed consent, to run the research project to protect both participants and institutional bodies, and to ensure that the institution is comfortable with any information eventually published. Taking all of these items into consideration, and for the reasons previously mentioned, I decided against person-to-person contact with no-shows. I also only reported data gathered freely from the respondents, and campus data previously published, either in reports to Campus Council, University Council or on the Campus' web pages.

3.6 Validity and reliability

The ways researchers address validity and reliability in a critical realist approach are different than how they address these concepts in other approaches to research. In a pure quantitative study, validity concerns the extent to which items are accurately measured by the particular instrument, and reliability concerns the extent to which the study would have the same results if used in the same situation on repeated occasions (Creswell, 2014, p. 207). In a purely qualitative study, validity and reliability concern questions such as: how were the data collected and analysed to ensure that the findings are plausible and consistent, how well were findings interpreted, can one draw inferences from the findings, and would a different instrument measure the same constructs in the same way as the one used in the study (ibid., p. 251)?

However, a critical realist carries a different burden for validity and reliability and, guided by the methodological approach, aims to show a legitimately-followed chain of evidence. Smith and Johnston (2014) address the concern under four headings related to the mechanism and familiar to quantitative researchers. These are *measurement validity* in which the critical realist queries the quality of information the instrument produces about events and the adequacy of the instrument itself; *internal validity*, concerned with showing that the mechanism, identified as generative, is actually a possible cause of the events that have occurred; *ecological validity*, concerned with the environment of the study being as natural and typical as possible reflecting normal practice; and *external validity* which concerns the evidence that the mechanism that underpinned the actual events in the research setting also operates external to the particular research context (ibid., p. 132).

In this case, the majority of the focus is on the quantitative treatment of data collected with items adopted and adapted from instruments used in peer-reviewed studies on motivation and barriers to learning. Colleagues within the environment tested the instrument, I gathered data on motivation and barriers from participants at points in time when these factors would have been most relevant to the participants, and nothing about the environment selected for the study was unusual. In addition, the issue of no-shows is an actual one observed to occur in other contexts, and reported in many environments. Consequently, I treated the validity concerns as adequately met.

3.7 Summary

This chapter described the critical realist research paradigm that guided the choice of the research question, the approach, the methods of collecting data, the design of the instrument, target population, methods of data analysis and assumptions made. The chapter also explained the steps taken to ensure that I carried out the study ethically and the attention I paid to reliability and validity, and then, laid the foundation for the data analysis stage using factor analysis and logistic regression models.

4. Findings

The aim of this research was to investigate the relationship between the motivation for submitting an application to a postgraduate degree programme, demographic factors, and the enrolment decision of a successful applicant. The research question that guided the collection and analysis of data was *'What is the relationship between students' motivation to apply to postgraduate study, their demographic profile, and their decision to enrol in a postgraduate programme after receiving an offer of admission?'*

This research question emerged from my exploratory hypothesis that postgraduate applicants driven by extrinsic externally-driven motivators are more likely the ones who do *not* enrol, and that admitted applicants who do not enrol are more likely to cite barriers that one cannot challenge. Further to this, I suggest that certain barriers were more likely associated with applicants with certain motivation themes, and in particular, non-enrolees may more often provide dispositional barriers to enrolment.

I addressed this main question through three sub-questions:

1. What is the motivation of postgraduate applicants who accept places offered?
2. What is the motivation of postgraduate applicants who do not proceed to enrol after receiving an offer of admission?
3. Is there a difference in motivation or demographic profile between applicants who formally reject an offer of admission, and those who informally reject an offer of admission by becoming no-shows?

This chapter begins by summarising the target population and respondents, and explaining the tools used in each step of the analysis. The chapter continues with a descriptive statistical view of the respondents, including key bivariate relationships of the motivations and barriers. The chapter concludes with the results of the factor and regression analyses, and a summary.

4.1 Summary of the target population, respondents and analytical tools used

Table 8 provides a summary of the target population and respondents showing a 35.5% response rate. While I hoped for a higher response rate, the number aligned with a 34.2% average found after systematic review of 98 studies reported in four counselling journals of studies (Poynton, 2019, p. 39), and with the 30% average rate in similar social sciences fields cited by Saldivar (2012), providing the results of a 2007 research report by The University of Texas at Austin Center for Teaching and Learning¹⁸.

Table 8 Summary of target population and respondents

Total number in target population = 560
Total number who responded to original email = 198
Percentage who responded to original email = 35.5%
Number who opted out of the study = 1
Number who did not complete the entire main survey questionnaire = 17
Number of valid respondents = 181

I examined the data using a variety of techniques including measures of central tendency and dispersion, exploratory factor analysis, regression analysis, and bivariate correlations. As the first step, I characterised the sample by calculating frequencies of the various responses. I then cross-referenced the frequencies of *Gender*, *Full/Part-time status*, *Type of programme* and *Region of nationality* of the sample to published statistics of new postgraduate students at the Campus. While it was technically possible to compare the characteristics of the sample to the overall applicant pool, I took the decision not to do so. This is because applicants do not give explicit permission for the use of their application data in this way, and the campus does not publish statistics about either undergraduate or postgraduate applicants.

Next, I cross-tabulated the acceptance, enrolment, and no-show decisions with a number of the independent variables to get a better sense of the data. As a foundation for the regression analyses that provided a more in-depth view of the responses, I used

¹⁸ The author retrieved this (now unavailable) 2007 report on response rates on March 13, 2012 from <http://www.utexas.edu/academic/ctl/assessment/iar/teaching/gather/method/surveyResponse.php>

factor analysis to reduce the number of motivations and barriers in the questionnaire into a manageable number of variables that would be representative. I summarize the findings below and discuss these in Chapter 5.

4.2 Descriptive statistics

4.2.1 Profile of respondents

Table 9 summarises a descriptive profile of respondents by age range, gender, programme type, employment status, planned enrolment status, area of study, type of degree programme, region of nationality and academic background. The table shows that over three-quarters of the respondents were female, and over half of the respondents were under the age of 35. It is not possible to consider the age of applicants in context, as the age of the graduating class is not one of the types of data presented in the campus' statistical publications. Most of the respondents were either local or regional with just over 10% from countries outside of the Caribbean. In this context, 'local' refers to nationals of Barbados, 'regional' refers to nationals of other countries in the Caribbean, and 'international' refers to nationals of all other countries.

Just over half of the respondents were relatively recent graduates with 51% having graduated within the previous 5 years, and the majority (>75%) had applied to enter taught master programmes. Most of the respondents were working full-time, 61% applied to full-time studies, and the significant majority (over 85%) were not current students in any academic programme at the time of submitting the application. A suggested reason for the low number of applications from current undergraduate students is that the current cohort of local undergraduate students would have registered during the 2014 to 2018 period, and therefore included in the cohorts required to contribute financially under the 2013 tuition fee policy. These students might wish to be sure of a career path and the ability to service a new, or increased, student loan before committing to the cost of a higher degree. These undergraduates may be more debt-shy than students in other jurisdictions where students have, over time, become accustomed to the responsibility of debt and have access to more

comprehensive loan schemes. The challenge for regional students may be the fact that their investment would not just be the programme cost, but accommodation and living expenses as well as the opportunity cost of remaining in Barbados an additional year or more. The challenge might also be the absence of student loans in their territories.

Table 9 Summary demographic profile of respondents

Type of Programme	Number	Percent	Area of Study	Number	Percent
Taught Masters	139	76.8%	Social Sciences	84	46.4%
Postgraduate Diploma	26	14.4%	Law	4	2.2%
Master of Philosophy	10	5.5%	Medical Sciences	21	11.6%
Doctoral programme	6	3.3%	Science & Technology	13	7.2%
			Humanities & Education	59	32.6%
Employment Status	Number	Percent	Planned Enrolment Status	Number	Percent
Working Full-time	128	70.7%	Full-time	111	61.3%
Working Part-time	14	7.7%	Part-time	70	38.7%
Not Employed, Seeking Employment	26	14.4%			
Not currently Employed, Not seeking employment	13	7.2%			
Highest level of Education	Number	Percent	Current Educational Status	Number	Percent
Undergraduate degree	135	74.6%	Not in any programme	154	85.1%
Postgraduate Degree	28	15.5%	Currently in Undergraduate programme	18	9.9%
Secondary Education	18	9.9%	Currently in Postgraduate programme	9	5.0%
Gender	Number	Percent	Region of nationality	Number	Percent
Female	139	76.8%	Local	87	48.1%
Male	39	21.5%	Regional	75	41.4%
Prefer not to state	3	1.7%	International	19	10.5%
Years since last degree	Number	Percent	Age Range	Number	Percent
Under 5 years	93	51.4%	24 years old and under	43	24.4%
5-9 years	42	23.2%	25 - 34 years old	70	39.8%
10-14 years	17	9.4%	35-44 years old	43	24.4%
15 years and over	11	6.1%	45-54 years old	20	11.4%
Still an UG student/NA	18	9.9%			

4.2.1.1 Comparison to previous postgraduate cohorts

To determine whether the survey respondents were representative of postgraduate cohorts at the Campus, I compared the profile of respondents to statistics published by the Campus for the previous two academic years. Table 10 presents the result of this comparison.

Table 10 Comparison to previous postgraduate intakes¹⁹

	New Postgrads 2016-2017	New Postgrads 2017-2018	Survey Respondents
Type of Programme	Percent	Percent	Percent
Taught Masters	63%	66%	77%
Postgraduate Diploma	24%	22%	14%
Master of Philosophy	8%	7%	6%
Doctoral programmes	5%	6%	3%
Enrolment Status	Percent	Percent	Percent
Full-time	66%	69%	61%
Part-time	34%	31%	39%
Gender	Percent	Percent	Percent
Female	70%	74%	77%
Male	30%	26%	22%
Region of Nationality	Percent	Percent	Percent
Local	62.8%	65.7%	48.1%
Caribbean Region	31.7%	28.5%	41.4%
International	5.5%	5.8%	10.5%

The published statistical data placed respondents in similar percentage ranges in terms of gender, attending status and type of programme. However, the sample was not as representative as those factors in the region of nationality, with local respondents less represented in the sample (48.1%) than the 62.8% local cohort in 2016 and the 65.7% local cohort in 2017. It is possible that, both the recently revised tuition fee policy of the local government and the lack of comprehensive information available to local applicants, contributed to the lower than expected participation by local students in the study. In addition to a lack of data on the range of ages of the new cohorts, there was no public information available on working status, or previous qualifications to allow further comparison.

¹⁹ Data from Cave Hill Campus Statistical Reports as accessed from <http://www.cavehill.uwi.edu/About/reports.aspx> on April 29, 2018.

4.2.2 Key bivariate relationships

I achieved further views of the respondents by creating cross-tabulations of the respondents who accepted and either enrolled or became no-shows, by region of nationality, gender, employment status, age range, and the range of years since their most recent degree. These cross-tabulations, shown in Table 11, revealed a notable area of concern in science and technology, medical sciences and law programmes, with less than 40% of respondents in each of these areas of study accepting places and enrolling. International candidates were just as likely to enrol as to default after accepting a place.

By age range, the youngest respondents (24 and under) showed the highest rate of not accepting and less than 50% of respondents in this category enrolled. On the other hand, respondents in the 45 and older age categories had the lowest enrolment rate with almost 70% either not accepting or not showing up to enrol. In terms of employment status, applicants who reported seeking employment had the highest ratio of respondents not showing up after accepting. The no-show incidence showed no real bias across gender with females just slightly less likely than males to enrol after accepting.

Other high rates of not showing up were those respondents accepted to taught master degree programmes, the majority of which are self-financing. Also of note was the finding of respondents who applied to part-time study over 50% more likely to just not show up than formally reject a place. On the other hand, respondents who were most likely to enrol as expected include those entering a Humanities programme, respondents already enrolled in a postgraduate programme, and those heading on to research or doctoral studies.

Table 11 Cross-tabulations of demographic data

Category		Respondents who Did Not Accept	Respondents who Accepted and Enrolled	Respondents who Accepted <i>but were No Shows</i>
Gender	Female	20.1%	54.7%	25.2%
	Male	23.1%	48.7%	28.2%
	Prefer Not to State	66.7%	33.3%	0.0%
Age Range	24 years old and under	32.6%	46.5%	20.9%
	25 – 34 years old	18.6%	55.7%	25.7%
	35 – 44 years old	14.0%	67.4%	18.6%
	45 years old and over	24.0%	32.0%	44.0%
Employment Status	Working Full-time	17.2%	57.0%	25.8%
	Working Part-time	50.0%	35.7%	14.3%
	Not working, Seeking Employment	30.8%	38.5%	30.8%
	Not working, Not Seeking Employment	15.4%	61.5%	23.1%
Current Education Status	Not in any programme	18.8%	54.5%	26.6%
	In UG programme	38.9%	38.9%	22.2%
	In PG programme	33.3%	55.6%	11.1%
Highest Education Level	Undergraduate Degree	20.7%	52.6%	26.7%
	Postgraduate Degree	14.3%	64.3%	21.4%
	Secondary	38.9%	38.9%	22.2%
Years since last degree	Under 5 years	24.7%	50.5%	24.7%
	5 – 9 years	14.3%	54.8%	31.0%
	10 – 14 years	17.6%	52.9%	29.4%
	15 years and over	0.0%	90.9%	9.1%
	Still a Student/Not applicable	38.9%	38.9%	22.2%
Region of Nationality	Local	14.9%	60.9%	24.1%
	Regional	25.3%	49.3%	25.3%
	International	36.8%	31.6%	31.6%
Area of Study	Social Sciences	22.6%	48.8%	28.6%
	Law	50.0%	25.0%	25.0%
	Medical Sciences	38.1%	33.3%	28.6%
	Science & Technology	23.1%	38.5%	38.5%
	Humanities & Education	11.9%	71.2%	16.9%
Enrolment Status	Full-time	25.2%	52.3%	22.5%
	Part-time	15.7%	54.3%	30.0%
Type of Programme	Taught Masters	24.5%	46.0%	29.5%
	Postgraduate Diploma	15.4%	69.2%	15.4%
	Master of Philosophy	10.0%	90.0%	0.0%
	Doctorate	0.0%	83.3%	16.7%
Total	Overall % in each group	21.5%	53.0%	25.4%

4.2.3 Motivation to apply, barriers to enrolment

The instrument contained a total of 20 possible motivations and 13 barriers. As previously mentioned using Likert-type scales to record motivations and barriers allows researchers to treat such constructs as numeric variables for analysis. After converting

the data as outlined in the previous chapter, I was able to examine the relative significance of each motivator and barrier, through calculating the means and standard deviations. The composite number of doctoral respondents (6) was too small to extract for any meaningful analysis so I combined the responses in these categories and reported the composite totals.

4.2.3.1 Motivation to apply

Table 12 shows the means and standard deviations of the motivation scores of all valid respondents, ordered from the highest means to the lowest.

Table 12 Motivation factors of all valid respondents

Question	Motivation to Apply	Mean	Standard Deviation
12	Develop Skills	4.58	.667
11	Expand Knowledge	4.49	.750
19	Progress In Career	4.45	.897
05	Natural Step	4.39	.719
07	To be Recognised And Contribute	4.39	.826
13	Increase Earning Power	4.35	.922
20	Access Professional Networks	4.08	.897
18	Enter Particular Profession	3.85	1.167
06	Want To Continue Studying	3.82	1.072
17	Gain Experience	3.79	1.130
14	Progress To Higher Degree	3.58	1.101
03	Prove Ability To Myself	3.46	1.258
08	Set Example For Children	3.60	1.026
01	Encouragement of Academic	3.11	1.256
10	Change Career	2.97	1.316
02	Advice of Employer	2.72	1.274
09	Use Available Funding	2.65	1.277
04	Prove Ability To Others	2.53	1.103
15	No Jobs Available	2.61	1.171
16	Delay Entry To Job Market	2.06	.917

The highest means within the motivators to apply related to personal and professional development factors including a desire to develop skills, expand knowledge, progress in a career, gain recognition and contribute to a chosen field, move forward academically, and to increase earning power. The means continued in decreasing order of influence with factors associated with human capital and signalling, that is, accessing professional networks and qualifying to enter a profession.

The standard deviations showed a tightness of clustering of values around the mean, gradually increasing going down the list of the *Strongly agree* and *Agree* options, with the spread becoming broader for the Neutral options and gradually decreasing for the Disagree options. This showed a high level of confidence in ascribing professional reasons as motivating factors. The data also showed that respondents were neutral about the influence of others, including employers, and as a body, they were not motivated to apply to a particular programme simply because funding was available, or because of a challenging job market - with these items appearing at the bottom of the lists of means.

Respondents who accepted vs. respondents who did not accept

I separated the dataset of 181 into two groups – the 142 respondents who accepted the places offered, and the 39 respondents who did not accept the places offered, to see whether responses to individual items differed between those who accepted and those who did not. Within these two groups, I calculated measures of central tendency and dispersion, and examined the profiles for similarities and differences.

The separation into *Accepts* and *Did not accepts* showed a minor change in the order of the positive motivators, with professional and personal development factors remaining at the top of both lists. The lower end of the scale was also very similar in the responses to factors related to the opinions of others (Q 01, 10, 02). There was a minor shift up in order of significance of the factors related to meeting self-imposed expectations (Q 08, 14, 03), and a minor shift down in importance at the lowest end of the scale of factors related to the job market (Q 09, 15, 16). Even though the order did not change greatly, three factors showed noticeable changes in means, with an intrinsic motivator 'Wanting to Prove Myself' having a higher mean within the *Did not accepts*, and two externally-driven extrinsic motivators 'Encouragement of an academic' and 'Availability of funding' having lower means within the *Did not accepts*.

Table 13 Motivation to apply separated into accepts and not-accepts

Q	Motivation to Apply	Accepted Place (N=142)		Did Not Accept Place (N=39)		Difference in Means
		Mean	Std. Dev	Mean	Std. Dev	
12	Develop Skills	4.58	.708	4.59	.498	0.01
11	Expand Knowledge	4.47	.750	4.54	.756	0.07
19	Progress In Career	4.44	.949	4.51	.683	0.07
07	To be Recognised And Contribute	4.43	.802	4.23	.902	-0.20
05	Take Natural Step	4.39	.724	4.36	.707	-0.03
13	Increase Earning Power	4.37	.926	4.28	.916	-0.09
20	Access Professional Networks	4.11	.905	3.97	.873	-0.14
18	Enter Profession	3.87	1.166	3.77	1.180	-0.10
06	Want To Continue Studying	3.81	1.065	3.85	1.113	0.04
17	Gain Experience	3.75	1.131	3.92	1.133	0.17
08	Set Example For Children	3.57	1.055	3.69	.922	0.12
14	Progress To Higher Degree	3.54	1.152	3.72	.887	0.18
03	Prove To Myself	3.39	1.298	3.72	1.075	0.33
01	Encouragement of an Academic	3.20	1.273	2.79	1.151	-0.41
10	Change Career	3.00	1.347	2.85	1.204	-0.15
02	Advice of Employer	2.75	1.318	2.64	1.112	-0.11
09	Use Available Funding	2.73	1.316	2.36	1.088	-0.37
15	No Jobs Available	2.61	1.179	2.64	1.158	0.03
04	Prove To Others	2.50	1.141	2.64	.959	0.14
16	Delay Entry To Job Market	2.03	.937	2.15	.844	0.12

Motivation separated into respondents who enrolled and those that did not enrol

I then grouped the respondents into the 96 who enrolled and the 85 respondents who did not ultimately enrol – either directly by rejecting the offer or indirectly by not submitting any notification of the intent to reject the offer. The basic statistical profile of these subgroups follows in Table 14 and shows a relatively similar order of influence, with professional and personal development factors at the top, extrinsic factors in the middle and job market factors at the bottom of both lists. Here two factors showed noticeable changes in the means, with intrinsic factor ‘Wanting to prove myself’ having

a higher mean within the *Did not enrols*, and the externally-driven extrinsic 'Availability of funding' motivator having a lower mean within the *Did not enrols*.

Table 14 Motivation of respondents who enrolled vs. respondents who did not enrol

Q	Motivation to Apply	Accepted and Enrolled (N=96)		Did Not Enrol (N=85)		Difference in Means
		Mean	Std. Dev	Mean	Std. Dev	
12	Develop Skills	4.51	.795	4.66	0.477	0.15
05	Take a Natural Step	4.47	.710	4.29	0.721	-0.17
07	Recognise And Contribute	4.45	.793	4.32	0.862	-0.13
11	Expand Knowledge	4.41	.815	4.58	0.661	0.17
19	Progress In Career	4.36	1.037	4.55	0.699	0.19
13	Increase Earn Power	4.33	.970	4.36	0.871	0.03
20	Access Prof Networks	4.09	.985	4.06	0.792	-0.03
18	Enter Profession	3.82	1.179	3.88	1.159	0.06
17	Gain Experience	3.79	1.132	3.79	1.135	0.00
06	Want To Continue Studying	3.72	1.140	3.93	0.985	0.21
08	Set Example For Children	3.58	1.053	3.61	1.001	0.03
14	Progress To Higher Degree	3.57	1.167	3.59	1.027	0.02
03	Prove To Myself	3.30	1.323	3.64	1.163	0.33
01	Encouragement of Academic	3.22	1.241	2.99	1.268	-0.23
10	Change Career	3.04	1.329	2.88	1.304	-0.16
09	Use Available Funding	2.84	1.268	2.42	1.257	-0.42
02	Advice of Employer	2.79	1.289	2.65	1.260	-0.14
15	No Jobs Available	2.65	1.124	2.58	1.228	-0.07
04	Prove To Others	2.49	1.170	2.58	1.028	0.09
16	Delay Entry To Job Market	2.05	.956	2.06	0.878	0.01

Motivation separated into respondents who enrolled and those that became no-shows

Next, I separated the subset of 142 respondents who accepted places, grouping these into the 96 respondents who enrolled, and the 46 respondents who accepted but did not show up to enrol. The basic statistical profile of these subgroups, following in Table 15, shows that between the respondents who ultimately enrolled and the no-shows, the greatest difference in scores appeared near the bottom of the list of means. Personal and professional development items remained the most commonly identified as influential. In this case, I saw noticeable changes in two intrinsic factors with

‘Wanting to prove to myself’ and ‘Want to continue studying’ having higher means within the *No-shows*, and the externally-driven extrinsic reason of ‘Availability of funding’ having a lower mean within the *No-shows*.

Table 15 Motivation of respondents who enrolled vs. respondents who became no-shows

		Accepted and Enrolled (N=96)		Accepted but No-show (N=46)		Difference in Means
Q	Motivation to Apply	Mean	Std. Dev	Mean	Std. Dev	
12	Develop Skills	4.51	.795	4.72	.455	0.21
05	Take a Natural Step	4.47	.710	4.24	.736	-0.23
07	Recognise And Contribute	4.45	.793	4.39	.829	-0.06
11	Expand Knowledge	4.41	.815	4.61	.577	0.20
19	Progress In Career	4.36	1.037	4.59	.717	0.23
13	Increase Earn Power	4.33	.970	4.43	.834	0.10
20	Access Prof Networks	4.09	.985	4.13	.718	0.04
18	Enter Profession	3.82	1.179	3.98	1.145	0.16
17	Gain Experience	3.79	1.132	3.67	1.136	-0.12
06	Want To Continue Studying	3.72	1.140	4.00	.869	0.28
08	Set Example For Children	3.58	1.053	3.54	1.069	-0.04
14	Progress To Higher Degree	3.57	1.167	3.48	1.130	-0.09
03	Prove To Myself	3.30	1.323	3.57	1.241	0.27
01	Encouragement of Academic	3.22	1.241	3.15	1.349	-0.07
10	Change Career	3.04	1.329	2.91	1.396	-0.13
09	Use Available Funding	2.84	1.268	2.48	1.394	-0.36
02	Advice of Employer	2.79	1.289	2.65	1.386	-0.14
15	No Jobs Available	2.65	1.124	2.52	1.295	-0.13
04	Prove To Others	2.49	1.170	2.52	1.090	0.03
16	Delay Entry To Job Market	2.05	.956	1.98	.906	-0.07

Motivation separated into respondents who did not accept and those that accepted but became no-shows

I prepared a comparison of the 39 respondents who did not accept formally, and the 46 who were informal in the decision to not accept. The basic statistical profile of these subgroups follows in Table 16. Again, there was no dramatic change in the order except for the externally-driven extrinsic motivator ‘Encouragement of an academic’, that had a visibly higher mean value within the *No-shows* than within the *Not accepts*.

Table 16 Motivation of respondents who did not accept vs respondents who accepted and became no-shows

Q	Motivation to Apply	Did Not Accept (N=39)		Accepted but No-show (N=46)		Difference in Means
		Mean	Std. Dev	Mean	Std. Dev	
12	Develop Skills	4.59	0.498	4.72	0.455	0.13
11	Expand Knowledge	4.54	0.756	4.61	0.577	0.07
19	Progress In Career	4.51	0.683	4.59	0.717	0.08
05	Take a Natural Step	4.36	0.707	4.24	0.736	-0.12
13	Increase Earn Power	4.28	0.916	4.43	0.834	0.15
07	Recognise And Contribute	4.23	0.902	4.39	0.829	0.16
20	Access Prof Networks	3.97	0.873	4.13	0.718	0.16
17	Gain Experience	3.92	1.133	3.67	1.136	-0.25
06	Want To Continue Studying	3.85	1.113	4.00	0.869	0.15
18	Enter Profession	3.77	1.18	3.98	1.145	0.21
03	Prove To Myself	3.72	1.075	3.57	1.241	-0.15
14	Progress To Higher Degree	3.72	0.887	3.48	1.130	-0.24
08	Set Example For Children	3.69	0.922	3.54	1.069	-0.15
10	Change Career	2.85	1.204	2.91	1.396	0.06
01	Encouragement of Academic	2.79	1.151	3.15	1.349	0.36
02	Advice of Employer	2.64	1.112	2.65	1.386	0.01
04	Prove To Others	2.64	0.959	2.52	1.090	-0.12
15	No Jobs Available	2.64	1.158	2.52	1.295	-0.12
09	Use Available Funding	2.36	1.088	2.48	1.394	0.12
16	Delay Entry To Job Market	2.15	0.844	1.98	0.906	-0.17

These results suggest that respondents in the various decision groups may experience the influence of certain intrinsic and externally-driven extrinsic motivators differently. Therefore, to properly address the research question, I needed a deeper view of the data using exploratory factor analysis. That analysis follows in a later section.

4.2.3.2 Barriers to enrolment

I carried out similar statistical tests for the responses to the *Barriers to enrolment* questions. Table 17 shows the significance of the barriers in order of descending mean scores of the 46 respondents who completed the *Barriers to enrolment* questions. Within the composite group, the only barriers to enrolment reported by respondents as influential were situational, concerning issues of funding and concerns about debt.

The means of dispositional-type issues like lack of self-confidence and change of mind fell squarely within the *Disagree/Strongly disagree* categories.

Table 17 Respondents who completed the barriers to enrolment questions

		All Barrier respondents who did not enrol (N=46)	
Q	Barriers to enrolment	Mean	Std. Dev
02	Insufficient Funding	3.93	1.323
03	Debt Concerns	3.52	1.378
01	Course Schedule	2.93	1.272
06	Discouraged By Lack of Employer Support	2.17	.973
13	No Longer Able To Do Programme	2.13	.957
10	Accepted To Preferred School	2.07	1.124
05	Discouraged By Lack of Family Support	2.04	1.032
09	Negative Cave Hill Experience	1.96	.965
11	Accepted To Other Programme at Cave Hill	1.93	.854
12	No Longer Have To Do Programme	1.85	.894
04	Changed My Mind	1.80	1.025
07	Insufficient Confidence in Ability	1.80	1.067
08	Concerns About Time	1.78	.892

Table 18 shows these respondents separated into those that did not accept and those that accepted but did not show up. The *Did not accept* and *No-Show* groups showed a few differences in the order of barriers reported to be of influence. The top issues in both cases were situational, related to issues of funding and debt concerns. However, the no-shows were slightly less emphatic in their rejection of dispositional issues than the applicants who did not accept the offer.

Table 18 Respondents who did not accept vs. those who did not enrol

Q	Barriers to enrolment	Barrier Respondents who did not accept (N=18)		Barrier Respondents who accepted but were No-shows (N=28)		Difference in means between Not Accepts and No-Shows
		Mean	Std. Dev	Mean	Std. Dev	
02	Insufficient Funding	4.00	1.361	3.83	1.295	-0.17
03	Debt Concerns	3.54	1.374	3.50	1.425	-0.04
01	Course Schedule	2.89	1.370	3.00	1.138	0.11
06	Discouraged By Lack of Employer Support	2.21	1.067	2.11	.832	-0.10
13	No Longer Able To Do Programme	2.14	.970	2.11	.963	-0.03
10	Accepted To Preferred School	1.82	.983	2.44	1.247	0.62
05	Discouraged By Lack of Family Support	2.04	1.138	2.06	.873	0.02
09	Negative Cave Hill Experience	2.04	1.105	1.83	.707	-0.21
11	Accepted To Other Programme at Cave Hill	1.96	.922	1.89	.758	-0.07
12	No Longer Have To Do Programme	1.79	.876	1.94	.938	0.15
04	Changed My Mind	1.71	1.084	1.94	.938	0.23
07	Insufficient Confidence in Ability	1.64	1.062	2.06	1.056	0.42
08	Concerns About Time	1.64	.911	2.00	.840	0.36

The descriptive statistics of both the motivation and barrier responses provided a preliminary response to the research question and the sub-questions. Techniques that could provide a further understanding of the data, and find possible correlations between the variables, required me to combine first the motivators and then the barriers into a few coherent themes, and to study those themes in more detail. The tool I needed at this stage was factor analysis.

4.3 Exploratory factor analysis

Factor analysis (FA) is a way of grouping multiple variables, based on correlation found in responses, into a reduced number of factors that are representative of the related sample (Tabachnick and Fidell, 2001, pp. 582-583). FA can be either a deductive process where a researcher is trying to confirm a particular theory or an inductive process, such as in this case where the exercise is exploratory seeking understanding. Using the *exploratory* factor analysis (EFA) option built into SPSS, I reduced the 20 potential motivators and the 13 barriers to enrolment listed in the instrument, to a format more suitable for inferential analysis. The steps involved in using SPSS to run an

EFA of the motivators and an EFA of the barriers to enrolment, and the results of both sets of analysis follow.

4.3.1 Motivation to apply

When undertaking an EFA, the first stage is to determine what, if any, underlying factors exist within the items using principal axis factoring (PAF). The second stage of the process involves performing a rotation of the underlying factors to expose the nature of the relationship between the factors, and guide a determination of whether there is a correlation in the new factors created by the PAF process. Stage three, involves the creation of meaningful names for the underlying factors extracted in stage two.

4.3.1.1 KMO measure and Cronbach's α coefficient

Before commencing the analysis of the motivation scale items, I ran the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy to ascertain whether the motivation responses were suitable for analysis in this way. KMO measures inter-variable correlation on a scale from 0 to 1 and, according to Beavers et al. (2013), the lowest threshold (mediocre) for KMO to be acceptable for analysis is 0.60. The KMO result for the motivation factors was 0.683 (see Table 19), signifying that the sample met the minimum standard of adequacy.

Table 19 KMO measure of sampling adequacy for motivators

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.683
Bartlett's Test of Sphericity	Approx. Chi-Square	706.933
	Degrees of Freedom	190
	Sig.	.000

Cronbach's α coefficient provides a test of reliability by measuring the degree to which the items in a scale are internally consistent. The theory behind this test is that all items intended to measure a particular construct would have to show correlation to a reasonably high degree in order for a researcher to confirm the scale as reliable.

Cronbach's α coefficient for the motivation factor section of the scale (Table 20), calculated by SPSS as 0.715, was within the acceptable range $0.7 \leq \alpha \leq 0.9$ (Tabachnick and Fidell, 2001, p. 57).

Table 20 Cronbach's alpha for motivation factors

Reliability Statistics	
Cronbach's Alpha	N of Items
.715	20

4.3.1.2 Principal axis factoring

I started the EFA by using the PAF on the motivation variables to calculate the variances of the responses. PAF produces a list of eigenvalues which are measures of the variance accounted for by each factor, with a high eigenvalue representing a high contribution to the variance and a low eigenvalue contributing little. I reviewed the resulting table in conjunction with a scree plot (Figure 5), which provides a graphical representation of the contribution to the variance of each additional factor in a declining scale of relevance.

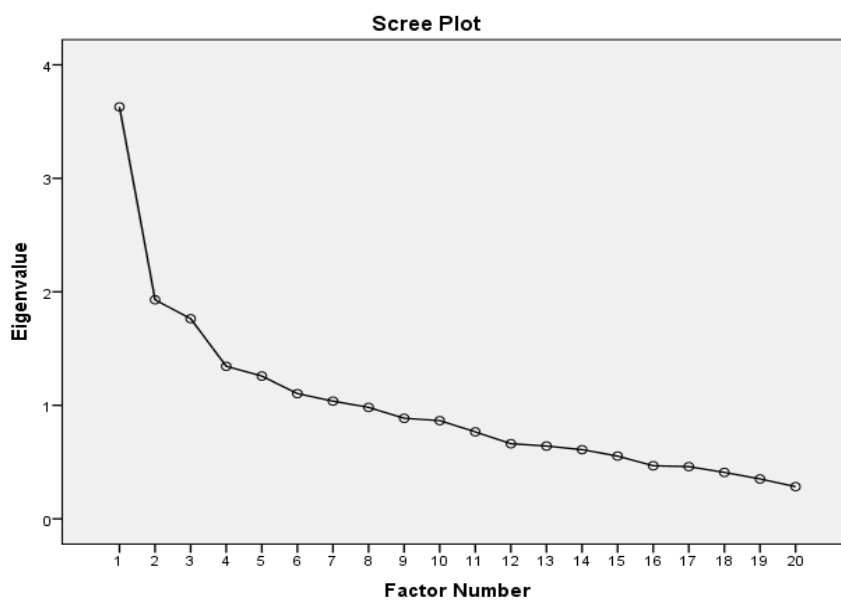


Figure 5 Scree plot of motivation factors

The rule-of-thumb with the scree plot is that the point of last relevant significance is the coordinate above the position where the elbow of the graph changes direction from a more vertically-inclined slope to a more horizontally-inclined slope (Osborne, Costello and Kellow, 2008, p. 3). The eigenvalues report produced seven factors over the default threshold of 1.0, but the scree plot showed a turn to the right at factor two and another turn to the right at factor four.

The power of the EFA method depends on the careful selection of the potential number of underlying factors, and either too many or too few factors will produce incorrect results. Because of the difference in the eigenvalue and scree plot results, as well as the relatively small sample size, I used Monte Carlo simulation software to conduct parallel analysis proposed by John Horn (1965). This simulation generates a random dataset based on the number of questions and respondents in the original scale, and produces a list of estimated eigenvalues. Comparing the values estimated by the software to the actual list generated by SPSS reveals the relevant number of factors, on the basis that a factor remains relevant if the simulated eigenvalue is greater than the actual eigenvalue. The parallel analysis suggested four factors, and I re-ran the PAF on that basis. (Appendix V includes the results of the Monte Carlo test).

4.3.1.3 Factor rotation

Factor rotation, the second stage of the EFA, produces factors that are as different from each other as possible. The factor rotation process plots the correlation of each original variable with the factor extracted by the PAF, and then rotates these factor loadings on the X and Y axes. This rotation preserves the nature of the results, but changes the position of the groups of factors, causing them to fall as close as possible to the axes. This rotation can either maintain the normal 90-degree angle between X and Y axes, or allow the axes to have a different angle between them (Osborne, Costello and Kellow, 2008, pp. 32-33). Before deciding on which rotation to use, I first rotated the 20 motivation factors using the Oblimin oblique method (that allows different angles between the axes, assuming some correlation between factors) and

then using the Varimax orthogonal method (that keeps the 90-degree angle, assuming no correlation). Examining the factor correlation matrix produced by the oblique rotation (Table 21) showed one correlation with an absolute value exceeding the 0.32 minimum given as the threshold by Osbourne (2008, p. 4 citing Tabachnick and Fidell, 2001). This meant that there was less than a 10% overlap in variance among the factors. However, both rotation patterns maintain the nature of the results, so as the orthogonal rotation produces results in a format that is simpler to interpret (Wildt et al., 1978 as cited by Brown, 2009, p. 21), I decided to retain and use those results.

Table 21 Factor correlation matrix of motivators

Factor Correlation Matrix				
Factor	1	2	3	4
1	1.000	.118	.241	-.414
2	.118	1.000	.113	-.160
3	.241	.113	1.000	-.090
4	-.414	-.160	-.090	1.000

Rotation Method: Oblimin with Kaiser Normalization.

The rotated factor matrix produced by the orthogonal rotation found four underlying factors comprising groups of variables that showed interrelationship. Table 22 shows the factor loadings meeting the minimum cut-off point of 0.32.

Table 22 Rotated factor matrix of motivators

Rotated Factor Matrix					
Question	Motivation Factors	Factor			
		1	2	3	4
07	To Be Recognised And Contribute	.804			
20	Access Professional Networks	.492			
19	Progress In Career	.570			
13	Increase Earning Power	.320			
14	Progress to Higher Degree	.321			
12	Develop Skills		.721		
11	Expand Knowledge		.742		
15	No Jobs Available			.650	
10	Change Career			.588	
16	Delay Entry To Job Market			.416	
02	Advice Of Employer				.505
04	Prove To Others				.524
03	Prove To Myself				.516
01	Encouragement by Academic				.416
Rotation Method: Varimax with Kaiser Normalization.					
Rotation converged in 6 iterations.					

4.3.1.4 Naming of factors

I named the four factors created by the rotation based on the theme of the questions included in each group, and retained these four factors for the analysis that follows later in this chapter.

Professional Development (Factor 1) comprised Questions 07 (To be recognised and contribute), 20 (Access professional networks), 19 (To progress in one's career), 13 (Increase earning power), and 14 (Progress to a higher degree). These items were a mixture of intrinsic motivators and motivators that are extrinsic in that they satisfy a desire for visible advancement within a profession. *Personal Development* (Factor 2) comprised personal improvement and development items: Questions 12 (Develop skills), and 11 (Expand knowledge) which were more intrinsic in that these satisfy an inner need for enrichment.

The third theme *Upgrade Marketability* (Factor 3) comprised Questions 15 (No jobs available), 10 (Change career), and 16 (Delay entry to the job market) with externally-driven extrinsic items related to the job market, including the absence of an available job, a wish to change jobs, or looking to fill time before entering the job market. The final theme *Meet Expectations* (Factor 4) comprised Questions 02 (Advice of employer), 04 (To prove to others), and 03 (To prove to myself) and 01 (Encouragement of academic). This final group included options related to extrinsic motivations, both internally-driven and externally-driven, of meeting expectations, including those of self, family, employers, friends and academic mentors.

Six items remained unused after the creation of the new factors, because the items did not sufficiently correlate with the groups with factor loadings calculated below the minimum point of 0.32. The unused motivators were a mixture of intrinsic: Q06 (Enjoyment of studying), internally-driven extrinsic: Q17 (To gain experience), Q05 (Take a natural step), and externally-driven extrinsic: Q08 (To set an example for my children), Q18 (To enter a career), and Q09 (Take advantage of available funding). Therefore, I decided to discard these six questions from the rest of the EFA.

4.3.1.5 Additional motivators

In the questionnaire, I had asked respondents to add additional motivators and to rate these according to the same 5-point Likert-type scale as the predefined motivators. After grouping the comments according to similarity, some definite themes emerged. Respondents made eighteen observations on the altruistic themes of wanting to contribute to the *quality of life and national development*. One respondent pointed out a perceived omission in the survey this way: 'Another motivation that is not directly captured in this survey is the strong need to contribute in a more direct and meaningful way to national discourse in the particular field.' Respondents in the fields of nursing, education, mental health, and legislative drafting who had applied to these taught master programmes, articulated a wish to help in the development of these areas in their respective countries. This theme had not emerged at this level of study in the review of the literature, and is of particular interest here because 15 of the 18 comments came from nationals of small island developing states in the Caribbean, and two comments were from nationals of states in Africa.

In a similar vein, a few comments highlighted an aspect of the influence of others which was different to encouragement and inspiration from friends and family more commonly seen in the literature. These responses spoke to the more negative *peer pressure* rather than the more positive *encouragement* aspect. A third emergent theme that I had not considered in the instrument concerned *self-help* issues. Some responses indicated motivation of a need to avoid depression, alleviate stress/frustration, wanting to get a break from their job, the hope of acquiring a new and better life, to understand the behaviour of individuals and the way people think, meet challenges at work, and to 'strengthen and improve my individual happiness and wellbeing as a woman and single mother'. One respondent commented on the motivation to join the campus community because of the excellent reputation of the professors, and because the institution is non-discriminatory 'with respect to race, gender or ethnic group', signifying a need for acceptance.

Other comments made by respondents were extensions or other perspectives of questions already included in the survey. For example, a number of respondents recorded a wish to *improve their job prospects* by: gaining more training, confidence or satisfaction; expanding their skills; becoming more marketable; or, becoming an expert, pioneer or consultant in their chosen field. Seven comments fell under the intrinsic theme of *following their passion*, including self-actualization, to make a contribution to research, wanting to reach a personal goal, and because of a love for academia. Appendix VI has the full list of comments, edited to remove any information that could identify the applicant.

4.3.2 Barriers to enrolment

As previously stated, factors in the *barrier's* section of Patricia Cross' 'Chain-of-response' (1981) model inspired my survey questions about barriers to enrolment - with one major exception. The Cross model aims to understand participation in adult learning activities from the ground up. Because my study focusses on adults who had *already* made the decision to start the application process, I did not consider some of the areas Cross brought out in her questions as related to this situation. For example, Cross included such factors as 'feeling too old', or 'being discouraged by a previous negative situation as a student'. However, I considered a person with such concerns unlikely to initiate an application for this level of study, or to provide the supporting documents necessary for consideration.

The 13 questions in the instrument gathered data on:

(A) Situational challenges that exist at a particular point in time, such as a lack of time or money:

- I could not gather sufficient funding in time.
- I have concerns about having to incur debt in order to finance this programme.
- My situation has changed and I am no longer able to do this programme.

- My situation has changed and I no longer have to do this programme.

(B) Institutional challenges that are in some way created by or related to the institution:

- There are difficulties fitting the course schedule around my current work or my family responsibilities.
- I was put off Cave Hill by a negative experience.
- I was accepted to a preferred institution.
- I was accepted to a different programme at Cave Hill.

(C) Dispositional challenges related to self-esteem, attitude to learning and being a student:

- I was discouraged because my spouse/partner/family is unsupportive.
- I was discouraged because my employer is unsupportive.
- I changed my mind about wanting to do a postgraduate programme.
- I do not have sufficient confidence in my ability to be successful in the programme.
- I was concerned about committing the time to the programme.

Any barriers that respondents added in the comments sections, additional to the ones listed in the survey, appear in a later section of this chapter.

Similar to the process previously outlined, I ran the PAF for the responses to the questions on barriers to enrolment. I had concerns about using EFA to analyse the barriers to enrolment because of the small size of the sample. In total, there were 198 respondents to the first survey, and 80 of those respondents became no-shows. Of these 80, 46 respondents completed the survey question on barriers to enrolment.

In reviewing the literature about sample sizes for an EFA, Beavers et al. (2013, p. 2) found initial suggestions of a minimum of five respondents per question, and further studies suggesting that the strength of the factors (four or more with loadings over .6) was more important than the absolute number. The literature also showed that small samples are not uncommon in the social sciences, and under the right conditions the

results could be valid (McNeish, 2017). Keeping in mind that this is an exploratory process and that follow-up studies could well gather more data with which to repeat the process, I decided to continue with the PAF and EFA, and report the results found.

4.3.2.1 KMO measure and Cronbach's α coefficient

From SPSS calculations, the KMO measure of sampling adequacy for the barriers scale was 0.687 (see Table 23). This denoted that the sample met the minimum standard of adequacy. Cronbach's α coefficient (Table 24) was 0.786 which also met the minimum standard.

Table 23 KMO measure of sampling adequacy for barriers

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.687
Bartlett's Test of Sphericity	Approx. Chi-Square	260.301
	Degrees of Freedom	78
	Sig.	.000

Table 24 Cronbach's alpha for barriers

Reliability Statistics	
Cronbach's Alpha	N of Items
.786	13

4.3.2.2 Principal axis factoring

The PAF of the barriers to enrolment produced a list with four eigenvalues greater than the 1.0 threshold. The scree plot in Figure 6 showed one elbow at factor two and a second at factor four. The list of estimated eigenvalues produced by a Monte Carlo simulation identified a maximum of three factors as relevant. Because of the very small sample size, I used the number generated by the Monte Carlo analysis, and re-ran the PAF with three factors.

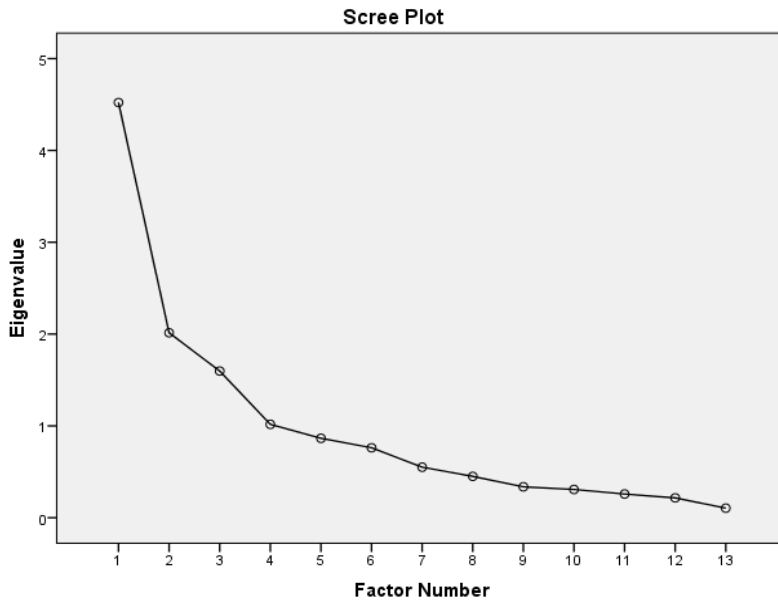


Figure 6 Scree plot of barriers to enrolment

4.3.2.3 Factor rotation

Similar to the process outlined in the earlier section on motivators, I rotated the 13 barrier factors first as oblique and then as orthogonal. For the same reason explained in that earlier section, I retained the orthogonal rotation results calculated using the Varimax method in SPSS (Tables 25 and 26).

Table 25 Oblique factor correlation matrix for barriers

Factor Correlation Matrix			
Factor	1	2	3
1	1.000	.073	-.376
2	.073	1.000	-.022
3	-.376	-.022	1.000

Rotation Method: Oblimin with Kaiser Normalization.

Table 26 Rotated factor matrix for barriers

Rotated Factor Matrix ^a				
Question Number	Barriers to enrolment	Factor		
		1	2	3
08	Concerns About Time	.993		
04	Changed My Mind	.657		
07	Insufficient Confidence	.619		
13	No Longer Have To Do Programme	.531		
11	Accepted To Other CH Programme		.813	
06	Discouraged By Employer		.743	
09	Negative CH Experience		.604	
10	Accepted To Preferred School		.502	
05	Discouraged By Family		.497	
12	No Longer Able To Do Programme		.471	
01	Course Schedule		.347	
02	Insufficient Funding			.856
03	Debt Concerns			.762

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

4.3.2.4 Naming of factors

The three underlying components identified from the Factor Rotation Matrix were:

Dispositional (Factor 1) items comprised Questions 08 (Concerns about committing time), 04 (Changed my mind), 07 (Insufficient confidence) and 13 (No longer have to do programme). These fit the dispositional dimension from the Cross (1981) model, related to the candidate's self-doubt. *External Restraint* (Factor 2) comprised Questions 11 (Accepted to other Cave Hill programme), 06 (Discouraged by employer), 09 (Negative Cave Hill experience), 10 (Accepted to preferred school), 05 (Discouraged by family), 12 (No longer able to do programme), and 01 (Difficult course schedule). This new factor was not a clear fit of either the Cross (1981) situational or institutional models, but comprised a mix of these two groups reflecting the restraining influence of an external source. The third group *Financial* (Factor 3), with the highest means and factor loadings, comprised two items - Questions 02 (Insufficient funding), and 03 (Concerns about debt). These questions fell within the situational category, but were very specific to financing.

4.3.2.5 Additional barriers to enrolment

From situational and institutional perspectives, the additional barriers articulated by respondents appeared out of sync with the responses to the survey questions. While there were nine comments highlighting situational issues, only two of these comments related to financing, which was actually the only survey response with scores in the *Agree / Strongly Agree* categories. The other situational comments included accepting an alternate offer, moving overseas, illness, and being too late to start classes. One item fell within the dispositional category with a respondent indicating insufficient preparation to start the programme in September. Notably, eleven comments mentioned institutional issues, identifying problems related to late acceptance letters, non-receipt of documentation, problems with housing, change in programme timetable, incorrect information about flexibility, inadequate information about financial support, and inadequate information about programme delivery.

4.3.3 EFA of all factors - motivation plus barriers to enrolment

Out of interest, I attempted to conduct one final EFA on all factors together. However, when combined into a single scale, the 33 factors failed both the KMO and the Cronbach's α coefficient tests with values of 0.308 and 0.690 respectively, meaning that the composite group was unsuitable for EFA.

Having used EFA to create coherent and justifiable themes of the motivations and barriers identified by the respondents, I moved onto regression analysis as the next analytical tool. The purpose of using regression analysis was to go beyond describing the data collected and to explore and interpret the data to determine a more insightful view and perhaps, find a basis for making predictions.

4.4 Regression analyses

Regression analysis is an analytical tool used to formulate relationships between variables, identifying which variables actually impact or can predict the outcome, which variables have no influence, and how variables influence each other (Teo, 2014, pp.

146-148). There are a number of ways of performing regressions to measure the existence and statistical significance of influence, and the correct type of regression depends on the data under analysis. To determine statistical significance requires the calculation of a p-value, which gives the percentage possibility that a result occurred in a sample by chance when in fact it does not occur in the population as a whole. For a p-value to be statistically significant the model should be applicable to at least 95% (represented as $p < .05$) of the general population (Tabachnick and Fidell, 2001). In the tables that follow, I have flagged p-values calculated by the various regression analyses as statistically significant.

This study required two different methods of regression. In the first set of analyses, I examined the motivator substructure that factored most prominently in each person's profile as calculated by the EFA. To facilitate this, I created new binary variables for each motivator substructure with values *0=Not most prominent*, and *1=Most prominent*. In the second set of analyses, as dependent variables I used the decision of the respondent to *Not accept/Accept*, *Not accept/No-Show*, *Not enrol/Enrol*, or *Enrol/No-Show*. As these are all dichotomous outcomes, I selected the binary (or binomial) logistic regression (Tabachnick and Fidell, 2001, p. 517) as the first appropriate regression method.

In a binary logistic regression, the independent variables when mathematically combined, predict the likelihood or probability that the particular dependent outcome has the value 1. In order for results to be valid, the analyst has to check the variables first and confirm that they do not violate essential assumptions (Teo, 2014, pp. 148-150). These assumptions follow:

- The dependent variables must meet the test of dichotomy. The variables must be mutually exclusive and exhaustive in that each can take one of only two possible values, and all cases must have one or other of these two values;
- None of the independent variables could result from repeated measurement;

- The Variance Inflation Factor (VIF) values of the combined group of independent variables must be between 1.0 and 5.0, signifying no multicollinearity; and
- A linear relationship must exist between the logit transformation of the dependent variable and any continuous independent variables.

Because the SPSS binary logistic programme can only use either the first or last item in a categorical list as a baseline reference point, and compares all other values to that reference point, I reviewed the responses to identify the highest recorded frequency of each variable. From this review of responses, I created the reference profile of: a local (Barbadian) female, between the ages of 25 and 34, who graduated within the last 5 years, working full-time, not currently enrolled in any programme, possessing an undergraduate degree, applying to enter a taught master programme in a social sciences area on a full-time basis. Therefore, for the process to work, I had to re-code the order of the *type of programme* options in the dataset so that the most popular type of programme appeared first on that list. Similarly, I had to adjust the coding for the *highest level of education* variable so that the *undergraduate degree* option headed that list.

Because this is an exploratory approach, I chose to use the *enter* method that adds all variables to the model at the beginning of the regression, instead of using *forward* or *backward* selection methods that exclude variables altogether based on statistical significance. Summaries of the main regression tables follow and, included in Appendix V are the *classification tables* produced before and after regression. The classification tables show if, and how, the independent variables selected for the analysis improved the ability of the baseline logistic model to predict the various outcomes.

4.4.1 Motivator outcomes – with demographic inputs

This set of binary logistic analyses examined the motivator substructure that factored most prominently in each respondent's profile. I included all of the demographic items as independent variables in each of the four models. For each independent variable,

Table 27 contains both the exp(B) value signifying the odds ratio of increase in the dependent variable for each increase of the independent variable, as well as the standard error (S.E.) showing the accuracy with which the result reflects the population. Where the independent variables are categorical, each 'increase' signifies a move to the next category, for example, *female* (0) to *male* (1).

Table 27 Prominent motivator substructure as outcomes

Independent Variables	Model 1: Professional Development	Model 2: Personal Development	Model 3: Upgrade Marketability	Model 4: Meet Expectations
	EXP(B) (S.E)	EXP(B) (S.E)	EXP(B) (S.E)	EXP(B) (S.E)
Male <i>compared to</i> Female	1.944 (.436)	.812 (.462)	.783 (.480)	.732 (.463)
Age	1.036 (.027)	.996 (.028)	.912 * (.034)	1.043 (.025)
Working Full-time (ref)				
Working PT <i>compared to</i> Working FT	1.086 (.809)	2.472 (.674)	.981 (.799)	.270 (.912)
Not working, Seeking Employment <i>compared to</i> Working FT	2.055 (.601)	1.040 (.597)	.364 (.644)	1.133 (.569)
Not working, Not Seeking Employment <i>compared to</i> Working FT	21.698 * (.989)	1.066 (.841)	.179 (1.193)	.112 (1.199)
Not in any programme (ref)				
In UG programme <i>compared to</i> Not in any programme	.545 (2.778)	1.099 (1.774)	.385 (1.585)	2.766 (1.489)
In PG programme <i>compared to</i> Not in any programme	.155 (1.265)	.830 (.870)	.893 (.879)	4.358 (.794)
Highest Level of Ed – UG Degree (ref)				
Highest Level of Ed PG Degree <i>compared to</i> UG Degree	.812 (.537)	1.239 (.515)	1.091 (.567)	.874 (.498)
Level of Ed Secondary <i>compared to</i> UG Degree	.400 (2.776)	1.151 (1.775)	1.099 (1.589)	1.550 (1.487)
Years since Last Degree	1.040 (.042)	.998 (.046)	.984 (.054)	.974 (.041)
Nationality - Local (ref)				
Nationality - Regional <i>compared to</i> Local	1.258 (.402)	1.485 (.386)	.476 (.402)	1.068 (.380)
Nationality - International <i>compared to</i> Local	5.182 * (.603)	.671 (.717)	.000 (NA)	1.433 (.623)
Constant	.027 (1.178)	.339 (1.145)	17.202 (1.298)	.135 (1.088)

* indicates significance at 5% level

Model 1: Professional development as prominent

The classification tables revealed that this model resulted in a 4% increase in the predictability of *professional development* as a motivator, with the percentage moving

from 73% before to 77% after the regression. The regression tables calculated two predictors of statistical significance. The first was employment status with respondents who were neither in the workforce nor seeking employment calculated as 21.698 times more likely to cite predominantly *professional development* motivating factors. The *professional development* motivators also featured more prominently with international respondents, who were 5.182 times more likely than local respondents to select those options.

Model 2: Personal development as prominent

This regression calculated that the application of this model made no difference in the predictability of *personal development* as a motivator, with the percentage remaining at 77% before and after the regression. The regression tables revealed no predictors of statistical significance and no predictors close to the significance threshold.

Model 3: Upgrade marketability as prominent

This regression computed that the model made no difference in the predictability of *upgrading marketability* as a motivator, with the predictability percentage calculated at 77% before and after the regression. However, the regression tables revealed one predictor of statistical significance. The model predicted that as the age of respondents *increased*, the predictability of this factor as a prominent motivator decreased by 9%.

Model 4: Meet expectations as prominent

The classification tables showed that the model resulted in a small increase in the predictability of *meeting expectations* as a motivator, with the percentage moving from 73% before to 74.5% after the regression. However, while variables in two categories *current educational status* and *employment status* came relatively close to the threshold, the regression tables revealed no predictors of statistical significance.

4.4.2 Acceptance & enrolment outcomes

In the preliminary calculation for this set of binary regressions, I used all available independent variables, including motivation, with various binary dependent variables. The results calculated five of the independent variables specifically: *gender*, *employment status*, *planned enrolment status*, *current educational status* and *highest level of education*, as not statistically significant in any of the four models. While the literature search had not revealed any studies with quite the same focus, I referred to those studies to determine if I should omit any of these five variables, thus making a more targeted selection and avoiding the problem of over-fitting. Based on that review, I refined the model to remove all of the variables calculated as not statistically significant - except for *gender*, as *gender* is a standard variable in every study.

4.4.2.1 Rationale for selection of dependent variables

Outside of the admissions department of a university/college, the assumption could well be that the options in response to a postgraduate offer of admission are straightforward. One might expect one of two outcomes. Either an applicant would accept a place and enrol, or reject the offer outright. However, this is not the case. Using data related to the valid respondents, Figure 7 shows the 78.5% (142 of 181) expectation of uptake of places turning into a reality of 53% (96 of 181).

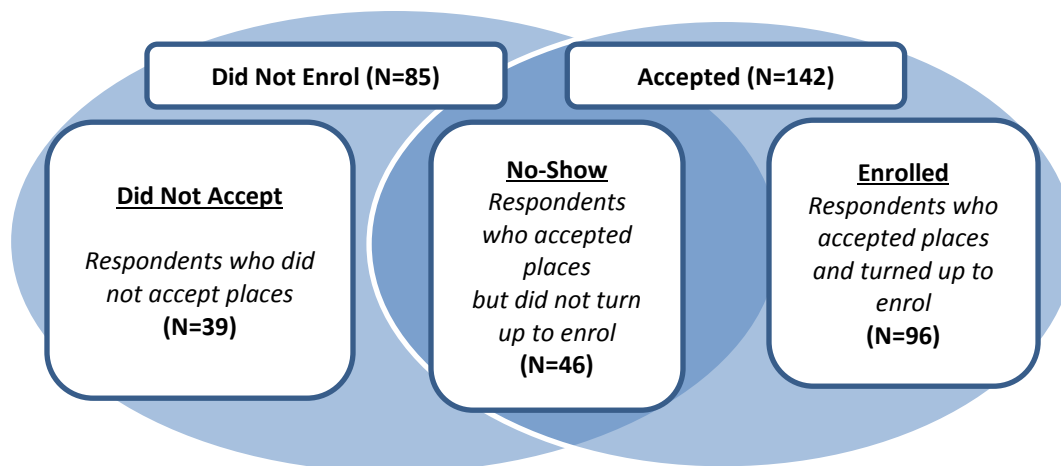


Figure 7 Decisions of all valid respondents

The difference reveals a population about which we know very little, underpins the choice of four dependent variable pairs (*Not accept/Accept*, *Not accept/No-Show*, *Not enrol/Enrol* and *Enrol/No-Show*), and explains the relationship between the terms as used in the analyses. Table 28 presents the results of the four related regressions.

Table 28 All acceptance and enrolment outcomes

Independent Variables	Model 5: Not Accept/Accept	Model 6: Not- Accept/No-Show	Model 7: Not Enrol/Enrol	Model 8: Enrol/No-Show
	EXP(B) (S.E.)	EXP(B) (S.E.)	EXP(B) (S.E.)	EXP(B) (S.E.)
Male <i>compared to</i> Female	.661 (.510)	.877 (.623)	.640 (.440)	1.119 (.526)
Age	.971 (.031)	1.031 (.034)	.883 ** (.033)	1.150 ** (.037)
Years since Last Degree	1.151 * (.070)	1.058 (.076)	1.176 ** (.049)	.862 ** (.055)
Nationality - Local (ref)				
Nationality - Regional <i>compared to</i> Local	.280 * (.545)	.377 (.643)	.382 * (.436)	1.602 (.514)
Nationality - International <i>compared to</i> Local	.251 (.708)	.449 (.874)	.215 * (.659)	3.133 (.761)
Area of Study - Social Sciences (ref)				
Area of Study - Law <i>compared to</i> Social Sciences	.618 (1.097)	.409 (1.408)	.929 (1.331)	.156 (1.895)
Area of Study - Medical Sciences <i>compared to</i> Social Sciences	.218 * (.744)	.188 (.947)	.560 (.708)	.625 (.903)
Area of Study - Science & Technology <i>compared to</i> Social Sciences	1.112 (.889)	.876 (1.039)	.751 (.720)	1.798 (.779)
Area of Study - Humanities & Education <i>compared to</i> Social Sciences	1.210 (.791)	.634 (.972)	2.332 (.597)	.425 (.708)
Taught Masters programme (ref)				
Postgraduate Diploma <i>compared to</i> Taught Masters	1.159 (.846)	.439 (1.186)	2.107 (.687)	.439 (.844)
Master of Philosophy <i>compared to</i> Taught Masters	2.756 (1.279)	n/a	14.957 * (1.208)	n/a
Doctorate <i>compared to</i> Taught Masters	n/a	n/a	18.500 * (1.188)	.082 * (1.268)
Professional Development motivator	1.571 (.238)	1.569 (.322)	1.171 (.223)	.889 (.257)
Personal Development motivator	.929 (.289)	1.063 (.409)	.640 (.243)	1.690 (.296)
Upgrade Marketability motivator	.796 (.289)	.771 (.359)	.967 (.241)	.851 (.280)
Meet Expectations motivator	1.065 (.269)	1.159 (.345)	.968 (.241)	1.076 (.280)
Constant	22.847 (1.209)	1.311 (1.392)	57.579 (1.143)	.012 (1.262)

* indicates significance at 5% level; ** indicates significance at 1% level.

Model 5: Not Accept/ Accept

The regression classification tables showed that the model resulted in a small decrease (from 79.2% to 78.7%) in the ability to predict acceptance of a place. However, the model did reveal a few predictors of statistical significance in making the decision to accept. Respondents in medical sciences areas showed *decreased* odds of 78.2% of accepting a place compared to respondents in the Social Sciences, and regional respondents showed *decreased* odds of acceptance of 72% compared to local respondents. In addition, respondents were 15.1% more likely to accept with every additional year after receiving their last degree. None of the motivators generated results of statistical significance in this model.

Model 6: Not Accept/No-Show

The purpose of this model is to predict the respondents who formally reject a place outright against those who reject a place informally by becoming no-shows. The classification tables showed a marginal increase of predictability of the No-Show outcome from 55.4% to 66.3% after adding the independent variables. However, there were no p-values of statistical significance, with the $p > .05$ for all items. This model showed no effect of motivators or demographics on the decision to formally/informally reject the offer.

Model 7: Not Enrol/ Enrol

This regression analysis looked more closely at the ability to predict which respondents would enrol against those who would not. These classification tables show a large increase of predictability of the model from 53.4% to 72.5% with a number of statistically significant individual independent variables. The *age* of respondents and the number of *years since the last degree* were both highly statistically significant but in opposite ways. The likelihood to enrol *decreased* by 11.7% with each extra year of age, and *increased* by 17.6% with each additional year since the award of the last degree. Also of statistical significance was the *region of nationality*, with regional respondents 62% less likely and international respondents 79% less likely to enrol than local

students. Also of note was that research master respondents were 15 times and doctoral respondents 18.5 times more likely to enrol than taught master respondents. None of the motivators generated results of statistical significance in this model.

Model 8: Enrol/No-Show

The last of this set of regression analyses calculated the ability to predict the respondents who enrol after acceptance and the subset of non-enrolees who 'disappear' and become no-shows. The classification tables showed a small improvement in the predictability of the model after the addition of the variables moving from 67.4% to 73%. The *age* of the respondent showed a highly statistically significant effect with the predictability of becoming a No-Show *increasing* by 15% with each *increased* year of age. The number of *years since the last qualification a respondent earned* also had a statistically significant effect, but with the likelihood of becoming a No-Show *decreasing* by 13.8% with each added year after graduation. Also, research master respondents were 93% less likely to become No-Shows than the taught master respondents. None of the motivators generated results of statistical significance in this model.

4.4.3 No-Show outcome – with barriers to enrolment as inputs

A rule-of-thumb is that to be effective, binary regression analysis needs a sample size of $50 + 8 \times \text{the number of independent variables}$ (Tabachnick and Fidell, 2001, p. 117), in this case, a minimum of 154. The 46 responses to the barrier part of the survey fell short of this, but for the purpose of completeness, I generated a logistic regression model from the Not accept/No-Show outcome with all of the demographic and programme independent variables used in the previous regression, with barriers to enrolment substructures added. The results are in Table 29.²⁰

²⁰ I also calculated another regression excluding the motivators because those factors did not show statistical significance in the Not-Accept/No-Show decision reported in Table 28. Omitting the motivators did not result in the emergence of findings of statistical significance; therefore, I retained the original version.

Table 29 Not accept/No-Show outcomes

Independent Variables	Model 9: Not Accept/No-Show	
	EXP(B)	S.E.
Male <i>compared to</i> Female	.751	1.383
Age	1.060	.053
Years since Last Degree	.957	.137
Nationality - Local (ref)		
Nationality - Regional <i>compared to</i> Local	.164	1.233
Nationality - International <i>compared to</i> Local	.186	1.524
Area of Study - Social Sciences (ref)		
Area of Study - Law <i>compared to</i> Social Sciences	.922	1.835
Area of Study - Medical Sciences <i>compared to</i> Social Sciences	.057	1.888
Area of Study - Science & Technology <i>compared to</i> Social Sciences	n/a	n/a
Area of Study - Humanities & Education <i>compared to</i> Social Sciences	1.682	2.043
Taught Masters programme (ref)		
Postgraduate Diploma <i>compared to</i> Taught Masters	.218	2.231
Doctorate <i>compared to</i> Taught Masters	n/a	n/a
Professional Development motivator	.928	671
Personal Development motivator	1.955	830
Upgrade Marketability motivator	.373	.775
Meet Expectations motivator	1.239	610
External Restraint barrier structure	2.333	.592
Dispositional barrier structure	.438	.566
Financial barrier structure	1.276	.644
Constant	1.877	2.698

Model 9: Not Accept/No-Show vs. barriers

The initial and final classification tables reflect a model with a notable improvement in prediction probability moving from 62.2% to 77.8%, but none of the variables produced effects of statistical significance. Because of the less than adequate sample size (N=46), I did not include the supporting tables or attempt further analysis.

4.4.4 Barrier outcomes – with motivation inputs

In this final stage of analysis of the data, I investigated the relationship between the barriers experienced by the non-enrolled respondents and the initial motivation each person had reported. For this, I had to use linear regression because this type of

analysis takes continuous dependent variables as inputs. In order to run linear regressions effectively, the data has to meet a number of essential assumptions (Teo, 2014, p. 84). These assumptions are:

- The relationship between every dependent variable and each independent variable has to be roughly linear;
- For each value of the independent variable, the level of error in the model should be similar; and
- The observations must have been independent.

In preparation for the linear regression, I first calculated bivariate correlations seeking statistically significant relationships between any of the motivators and barriers, and thus select variable pairs for the linear regressions. Table 30 shows the relevant bivariate correlations; however, noting that none of the motivation/barriers sample sizes met the rule-of-thumb minimum of 154 respondents.

Table 30 Bivariate correlations between motivations and barriers

Pearson Correlation	Barriers to enrolment		
	Dispositional	External Restraint	Financial
Motivators			
Professional Development	-.456 **	.236	-.147
Personal Development	-.103	-.263	.158
Upgrade Marketability	.153	.481 **	-.040
Meet Expectations	.232	.023	.307 *

** indicates significance at 5% level, ** indicates significance at 1% level*

Correlation values can fall anywhere between +1 and -1 in value, with the preceding sign indicating the direction of the relationship. The number indicating the strength increases from weak to strong according to the absolute size of the result (Bryman, 2012, p. 342). The bivariate correlation results suggest that three of the 12 correlations were statistically significant. One of these produced a moderate correlation with results of $r(45) = +.307$, $p < .05$, two-tailed, showing a positive relationship between the

financial barrier and the *meet expectations* motivators. The other two of the 12 correlations that were statistically significant showed a stronger correlation with $r(45) = -.456$, $p < .01$, two-tailed, reflecting a *negative* relationship between the *dispositional* barrier and the *professional development* motivators, and a *positive* relationship $r(45) = +.481$, $p < .01$, two-tailed, between the *external restraint* barrier outcome and the *upgrade marketability* motivators. Within this set of data, the other correlations of motivators with barriers were not of statistical significance.

I calculated linear regressions for three correlations. The first was to predict the reason *financial* barriers based on the motivation of a respondent to *meet expectations*. The resultant regression equation produced was $(F(1, 44) = 4.589, p = .038)$, with an R^2 of .094. This equation predicted the reason of a *financial* barrier with these motivating factors equal to $-0.018 + 0.361$, with both factors measured on the Likert-type scale used in the data collection ($1 = \text{Strongly disagree}$ to $5 = \text{Strongly agree}$). However, the R^2 value, that measures how closely the data falls to the calculated regression line, where increases in R^2 values signify an improvement in the degree to which the model fits, showed that the model explained only 9.4% of the variance. Even so, the regression calculated *financial* challenge as a factor that *increased* 0.361 times for every *increase* in the degree of need to *meet expectations*.

The second linear regression was to predict a *dispositional* barrier based on the respondents' motivations to develop their *professional* profile. The resulting regression equation $(F(1, 44) = 11.529, p = .001)$, with an R^2 value of 0.208, produced a predicted *dispositional* influence equal to $-0.024 - 0.518$ with both factors measured on the Likert-type scale described earlier. This R^2 value showed that the model explained over 20% of the variance, and that *dispositional* challenges as reported factors, *decreased* .518 times for every *increase* in the degree of need for *professional development*.

The last of this set of linear regressions was to predict the reason of *external restraint* as a barrier for a respondent with the motivation to *upgrade marketability*. This regression equation $(F(1, 44) = 13.258, p = .001)$ predicted the reason *external restraint*

as a barrier equal to $.034 + .569$ with both factors measured on the same 5-point Likert-type. The R^2 value of 23.2% showed that the model explained close to a quarter of the variance and that *external restraint* as a barrier *increased* .569 times for every *increase* in the degree of need of a respondent to *upgrade marketability*.

4.5 Summary

This chapter began with a summary of the data collected and an outline of the different analytical tools employed. The chapter continued with providing descriptive statistics about the respondents, key bivariate relationships, and basic statistical findings of the key demographic, motivation and barriers to enrolment variables. The chapter continued by explaining the exploratory factor analyses, regression analyses, and bivariate correlations that I ran to further investigate the data.

From the descriptive data, respondents appeared to be highly motivated by personal followed by professional goals, to attach less influence to the expectations of others or the job market, and to face challenges related to inadequate access to finance in their quest for postgraduate education. Exploratory factor analyses reduced the 20 motivation questions to four underlying motivation factors, and the 13 barriers to enrolment questions to three underlying structures. The four motivation structures found were *professional development*, *personal development*, *upgrade marketability* and to *meet expectations*. The three underlying substructures that emerged from the 13 barriers to enrolment were *dispositional*, *external restraint* and *financial*.

Some of the comments respondents made explaining their motivation to apply were similar to questions already on the instrument, but some additional motivation themes emerged that could be particular to the developing country environment in which the campus exists. These themes are a desire to contribute to the national quality of life, a need to help themselves because of a personal situation, and a feeling of pressure from their peers. Other barriers mentioned by respondents related to the situational and institutional barriers already included in the survey. I could not merge the comments

validly so I excluded them from the regression analyses, and will discuss the additional themes in the next chapter.

The regression results showed that in varying degrees *region of nationality, number of years since a respondent's last degree, age, type of programme*, as well as the *personal development* motivation factors of statistical significance in all outcome pairs *except* for the Not-Accept/No-Show enrolment model. The results identified *gender, employment status, planned enrolment status, current educational status* and *highest level of education* not to be of statistical significance in any of the models. Because of the small sample size of the barrier survey, the results of that regression analysis are not generalizable, but within the existing dataset, the process produced no finding of statistical significance.

The motivation models calculated a measure of predictability from some of the demographic data related to the respondent's profession and employment status. The models calculated that respondents who were neither currently in the workforce nor seeking employment were 22 times more likely than respondents working full-time to cite professional development motivators. The models also found that international respondents were 5 times more likely than local respondents to provide motivation factors in the professional development category. The other predictor of statistical significance was age, finding that as the age of respondents increased, the predictability of upgrade marketability as a prominent motivator decreased.

The results of the bivariate correlations run between the motivators and barriers suggest that respondents are more likely to provide *external restraint* barriers when the trigger to apply was a motivator to *upgrade marketability*, with the likelihood increasing at a rate of 0.569 for every step up the Likert-type scale. The results suggest that respondents more likely to point to *financial* issues, are more likely to be motivated by a need to *meet expectations*, with the tendency increasing at a rate of 0.361 for every step along the Likert-type scale. Respondents alluding to *dispositional* issues show a reverse relationship with respondents motivated by a desire to improve a

professional profile, with such barriers *decreasing* 0.518 times for every increase in the reported need for professional development.

In chapter 5, I present an overall discussion of the research findings and reflect on the path I took, pointing out some strengths and acknowledging various limitations of the work.

5. Discussion

This chapter begins with a discussion about the findings and continues with a reflection of the study, including the conceptual framework, the principles of critical realism as applied to the analysis, the methodology and the methods used. The chapter concludes with some strengths and limitations of the research, and a summary.

5.1 The findings

This study investigated the relationship between motivation factors and demographics on the final enrolment decision of a successful postgraduate applicant. The findings follow with the overall research question addressed first, and then the sub-questions which mirror the decision-making steps as they occur in the application process. The majority of respondents belonged to the category of taught postgraduate degree candidates (91%), with few research candidates responding to the survey. Therefore, the data and findings more accurately represent non-research students. Nevertheless, the typology of enrolment decisions and their relationship to demographics and motivation that I have created through this study is one that other researchers can apply in different contexts.

5.1.1 Overall research question

What is the relationship between students' motivation to apply to postgraduate study, their demographic profile, and their decision to enrol in a postgraduate programme after receiving an offer of admission?

5.1.1.1 *Motivation to apply*

The EFA generated from the survey responses identified four motivation groups or themes that somewhat mirrored my motivation categories of intrinsic, internally-driven extrinsic, and externally-driven extrinsic. The motivation theme with the highest average mean was *personal development*, comprising intrinsic needs of developing skills and expanding knowledge. Within the current body of respondents, this theme was not statistically significantly associated with any particular demographic profile,

suggesting that these intrinsic goals drive candidates regardless of age, educational background, achievement or stage in life.

The second motivation theme extracted from the EFA was *professional development*. This theme encompassed both intrinsic needs of recognition and contribution to the field, and internally-driven extrinsic needs, with respondents expressing the wish to progress in a chosen career, earn more money, qualify to enter a higher degree, and access professional networks. This theme was prominent in international respondents as well as respondents who were neither working nor seeking employment. With regard to the international respondents, they were over five times more likely than local respondents to be primarily motivated by this theme. Bearing in mind the direct expense as well as the opportunity cost of relocating to Barbados, it is reasonable for *professional development* goals to factor more highly with international applicants than *personal development* motivations, or either of the other two themes of *upgrading marketability* and *meeting the expectations of others*. Respondents who were not currently employed or seeking employment were 22 times more likely influenced by these professional development factors than respondents employed full-time, related perhaps to a strategy of repositioning before entry/re-entry to a profession.

On the whole, the body of respondents was neutral about the third motivation theme of *meeting the expectations* of employers, friends, or family. This theme was not associated with statistical significance to any particular demographic profile. The fourth theme encompassed job marketability factors, with externally-driven extrinsic motivators related to re-tooling to change a career, and delay entry to the workforce. The results showed the influence of *upgrade marketability* factors decreasing by 9% for every increased year of age of the respondent. This is realistic as younger candidates would have a higher likelihood of needing to establish a position in the workforce.

Respondents gave a few additional insights about their initial motivation. First, some respondents from developing states expressed motivation of wanting to improve the quality of life and contribute to nation-building. For the local respondents, this profile is

a positive reflection of expectations in national strategy documents, and suggests a measure of internalisation of these expectations. This is particularly important because the respondents making these comments had applied to self-financing programmes. While ‘contributing to the field’ is a common motivation of research students, I did not find this type of altruism, of wanting to ‘contribute to national development’, in the literature as a motivation for self-financing taught master students, who represented the majority of respondents.

Second, respondents expressed the influence of peer pressure, which has a negative connotation, rather than the positive, inspirational reasons more often seen in the literature. As stated earlier, in small states, education and professional information is often a matter of public interest, and locals may feel forced to undertake postgraduate study to appear as if improving their lot in life. This negative peer pressure falls into Carré’s prescriptive motive (de Oliveira Pires, 2009, p. 134) and is a type of externally-driven extrinsic motivation that may merit further investigation in the current context. A third externally-driven theme that falls into Carré’s extrinsic derivative motive (de Oliveira Pires, 2009, p. 134), involved respondents applying to postgraduate programmes in an attempt to avoid depression, find happiness, and alleviate personal stress. This was surprising because postgraduate programmes are likely to be intensive and stressful. This theme would benefit from exploration in a focus group.

5.1.1.2 Comparison to prior research findings on motivation to apply

In comparison with prior research, the motivations that emerged here were similar to those found for taught master students with a few exceptions. As only six doctoral respondents took part in the survey, I could not make any meaningful comparisons with prior research in that category. The highest ranked motivators I found were intrinsic, *personal development* goals that reflect the findings of: intellectual challenge (Jablonski, 2001; Wellington and Sikes, 2006; de Oliveira Pires, 2009; Mowjee, 2013); and gaining further knowledge of the subject (Leonard, 2005; Marks and Edgington, 2006; Wellington and Sikes, 2006; de Oliveira Pires, 2009; Morgan, 2013; Guerin, 2015). The taught master students in this study also highly ranked an intrinsic *professional*

development motivator associated with research students: a desire to contribute to the field (Brailsford, 2010; Tarvid, 2014; Guerin, 2015).

The study agreed with prior findings of internally-driven and externally-driven extrinsic *professional development* motivators in taught master students, such as: career advancement (Delaney, 1999; Jablonski, 2001; Donaldson and McNicholas, 2004; Marks and Edgington, 2006; de Oliveira Pires, 2009; Liu, 2010; Park and Wells, 2010; Morgan, 2013; Mowjee, 2013), and wanting to increase earning power (Donaldson and McNicholas, 2004). However, unlike the findings by (Delaney, 1999; Jablonski, 2001; Donaldson and McNicholas, 2004; Marks and Edgington, 2006; Hawkes, 2016), the study found respondents not motivated by wanting to change career. This could reflect the economic climate where new jobs are difficult to find, with employees more likely to try to advance in a current position. The study also found a mixed response to *meeting expectations* with respondents more motivated by the personal fulfilment of meeting their own expectations (Delaney, 1999; Jablonski, 2001; Leonard, 2005; Wellington and Sikes, 2006) and less motivated by meeting the expectations of family or employers (Jablonski, 2001; Ho, Kember and Hong, 2012; Hawkes, 2016).

However, I found a new motivator of a *desire to contribute to the nation* that I had not seen in prior studies of postgraduate taught master applicants, as well as the negative influence of *peer pressure* and an issue of *self-help*. These items could reflect that the countries in the Caribbean region, from which most of the population originates, are small developing nations. In these countries, the culture and economic environment may make citizens feel that it is their duty to contribute to nation building.

5.1.1.3 What influenced enrolment?

To respond to the question of what influenced enrolment, I used all of the demographic data and motivation factors to form a profile of 'the respondent'. I then used regression analysis to investigate this profile as a basis for predicting which respondents would enrol against those who would not. The analysis revealed six statistically significant predictors. First, the variables *age* of respondents and the

number of *years since the last degree* both were highly statistically significant, but in opposite ways. The likelihood of enrolling *decreased* by 11.7% with each additional year of age, and *increased* by 17.6% with each year since the award of the last degree. The *region of nationality* was also of statistical significance, with regional respondents 62% less likely and international respondents 79% less likely to enrol than local students. Noting that the number of research respondents was small, the *type of programme* provided measures of statistical significance, with research master respondents 15 times, and doctoral respondents 18.5 times *more* likely to enrol than taught master respondents.

None of the four motivator factors of *personal development*, *professional development*, *upgrade marketability* or *meet expectations* generated results of statistical significance in the enrolment decision model.

5.1.1.4 What barriers influenced non-enrolment?

Respondents reported financial issues as a barrier to enrolment more often than any other challenge, and overall respondents disagreed with the influence of the dispositional issues such as lack of self-confidence and change of mind. Respondents reported fewer *external restraint* challenges by way of lack of support of an employer/family or difficulty managing the course schedule. Situational issues added by respondents included moving overseas, illness, being too late to start classes, and not being prepared enough to start the programme in September.

While the influence of the dispositional items in the survey attracted responses of *strongly disagree* and *disagree*, many of the comments respondents added were institutional problems related to late acceptance letters, non-receipt of documentation, problems with housing, change in programme timetable, inadequate information about financial support, and inadequate information about the method of programme delivery. The lack of registering these as barriers could reflect the captive nature of the environment, in that while inefficiency could affect candidates, candidates do not allow it to be a deterrent to achieving their goals. Notably, the single

research candidate who accepted and became a no-show explained that she received late approval for her study leave, but that she would enrol in January the following year.

5.1.1.5 Comparison to prior research findings – barriers to enrolment

I found little research that gathered barriers to enrolment after acceptance. The two studies I found identified barriers of a change of financial circumstances, an unexpected event (Chapman, 1986); a lack of communication with the institution, and a lack of clear information about financial aid (Hudnett, 2015). My study agreed with financial circumstances as a significant barrier to enrolling but did not find that other situational, institutional or dispositional factors created a barrier to enrolment. However, while no institutional factors emerged from the EFA, it was clear from the comments of a need for better communication. The lack of response to the request for barriers was initially surprising but on reflection, could be related to the previously-outlined issues in the literature about culture in small island states (Punnett, Dick-Forde and Robinson, 2006). Where people exist with dependence on authority and under the influential role of power, they could be reluctant to provide information that they perceive as possibly detrimental to them in the long term. In addition, the absence of choice for face-to-face postgraduate degrees could lead to the candidates accepting a measure of inefficiency. This aspect would benefit from further qualitative research.

5.1.1.6 Are barriers related to motivators?

Bivariate correlations and regression analyses found no correlation between respondents driven by *personal development* goals and any of the three barrier factors. However, the regression and bivariate analyses did reveal three correlations between the other types of motivating influences and barriers that respondents selected. The first correlation occurred between respondents driven by *professional development* goals encompassing motivators of career progression and career advancement, and *dispositional* barriers. The correlation suggests that these candidates are *unlikely*

bothered with self-esteem or other dispositional issues, because as the prominence of this professional development motivator *increased*, the influence of *dispositional* influence *decreased*.

The second correlation found was between respondents motivated by market forces and affected by barriers caused by a lack of support, showing that as the 'level' of motivation of a respondent to *upgrade marketability* increased, so did the citing of *external restraint* as a barrier, showing a respondent subject to things outside of their control. The third correlation linked respondents motivated to apply for the extrinsic reason of needing to *meet expectations*, with the citing of *financial* barriers as a hindrance to enrolling. Using finance as a reason could provide an easy way out for respondents who felt pushed into applying for a programme in which they were not personally or professionally invested. In this relationship when the 'level' of this type of motivation *increased* so did the likelihood of respondents citing finance as a barrier.

5.1.1.7 Findings related to exploratory hypothesis

These findings supported the first part of my exploratory hypothesis that certain barriers are more likely associated with respondents who cite certain motivators. Regarding the second part of my exploratory hypothesis, the findings were that respondents with externally-driven extrinsic motivators were more likely to cite *financial* barriers to enrolments rather than *dispositional* barriers. On reflection, this is not surprising. Applicants driven by extrinsic externally-driven motives may be reluctant to cite *dispositional* barriers as those reasons may be easier for the influential external forces to challenge than *financial* barriers. Overall, the findings showed that the exploratory hypothesis to be of merit and that the type of motivation (intrinsic/extrinsic), and the source of motivation (internal/external), could prove influential in an enrolment decision. These findings are worthy of further investigation.

5.1.2 Sub-question 1

What is the motivation of postgraduate applicants who accept places offered?

5.1.2.1 *Who were the respondents who accepted places?*

The profile of respondents who accepted was very similar to the profile of all respondents. Over three-quarters of the respondents who accepted were female, more than 60% were under the age of 35, and three-quarters were working full-time. From the descriptive statistics, the *age* of the respondent provided the first defining factor in the formal decision to accept/not accept an offer. A quarter of respondents were in the 24 years and under age range, but this category represented 36% of the candidates not accepting. Candidates between 25 and 44 years of age were the direct opposite, representing 64% of the applicants, but 50% of respondents not accepting places. The *current educational status* was also a factor with current undergraduate students representing 10% of the respondents, 7% of the acceptances, but almost 20% of the not-accepts, suggesting that undergraduates may not be reliable candidates. The *employment status* was also suggested to be relevant with respondents who were working part-time comprising 8% of the population, 5% of the acceptances, but 18% of the not-accepts, suggesting that part-time workers may also not be dependable candidates.

Further to the descriptive statistics, regression analysis calculated three statistically significant predictors of the accept/not-accept decision. These are *years since the last qualification* with acceptance *decreasing* by 15% with every year after qualification; the *region of nationality* with regional students over 70% less likely than local students to accept; and the *area of study* with candidates in the medical science fields almost 80% less likely to accept than respondents in social science areas, which formed the reference category.

5.1.2.2 *What motivated them to apply?*

The respondents who accepted places reported highest motivators of personal and professional development. The more highly ranked motives for applying were to develop skills, expand knowledge, progress in a career, and for recognition and contribution to a chosen field. Respondents attributed less motivation to external

factors or a need for self-validation, and respondents disagreed with the use of engaging in a programme as a delaying job market tactic. Apart from a few notable observations there was little difference in the order of the motivators of respondents who did not accept, as compared to those who accepted. Respondents who reported the need for self-validation showed a higher rate of non-acceptance, but less influence from academics and even less influence of available funding. The decision not to accept could reflect a change in the importance of the person or situation that triggered the influence to apply and a reduction in a feeling of obligation. For example, some respondents were enrolled undergraduate students during the application period, but they may have graduated before making the enrolment decision. After graduation, those respondents may have moved outside of a perceived locus of control.

5.1.3 Sub-question 2

What is the motivation of postgraduate applicants who do not proceed to enrol after receiving an offer of admission?

5.1.3.1 Who were the respondents who did not enrol?

In reviewing the demographic and programme data of non-enrolled respondents, I found a number of things. First, respondents in science and technology, medical sciences and law fields were twice as likely as respondents in the other areas of study not to enrol after accepting an offer. This finding could reflect difficulties related to the particular nature of these professional fields that include doctors and lawyers. A similar percentage occurred with international candidates who were also twice as likely as local respondents not to enrol. This could be representative of the reality of the total costs associated, as students have to be physically present to participate in most programmes. This could reveal either a lack of understanding of the residency requirements or the programme structure, or a lack of financing for relocation as well as programme costs.

5.1.3.2 What motivated applications from respondents who did not enrol?

From the descriptive statistics, the motivation of applicants who did not enrol appeared similar to the motivation of applicants who did enrol. Personal and professional development goals headed the list of motivators in both cases. The top motivators in order of means were: developing skills, expanding knowledge and wanting to progress in a chosen career. Less important were job market factors and motivation stemming from the advice of an academic or employer, with these factors at the bottom of the influence scale of respondents who did not enrol. There were two noticeable differences between the two groups in the calculated mean of the factor *availability of funding* and the need for self-validation. The mean of 'available funding' was .42 lower in respondents who did not enrol when compared to respondents who did enrol, and the mean of the factor 'Wanting to prove myself' was .33 higher in the respondents in the *did not enrol* group.

5.1.4 Sub-question 3

Is there a difference in motivation or demographic profile between applicants who formally reject an offer of admission, and those who informally reject an offer of admission by becoming no-shows?

5.1.4.1 Who were the respondents who became no-shows?

Age was a notable factor in the instance of informal rejection. The oldest respondents had the highest ratio of no-show with three times the number of respondents in the 45 and older age categories not showing up after accepting an offer. In these age ranges, it could be more likely for a candidate to seek qualifications for personal rather than professional or job-related reasons and perhaps less invested in the degree programme. In terms of *employment status*, applicants who reported seeking employment had the highest ratio of respondents not showing up. That ratio could be indicative of a change in employment status since completing the application and an inability to commit time to study.

Other high ratios of no-shows were respondents accepted to taught master programmes, the vast majority of which are self-financing, and respondents who

applied to part-time study representing 28% of applicants, but 45% of no-shows. On the other hand, respondents most likely to show up as expected include those entering a humanities programme, respondents already enrolled in a postgraduate programme, and respondents heading on to research or doctoral studies. The no-show ratio showed no real bias across gender with males just slightly less more likely than females to become no-shows.

5.1.4.2 *What motivates not accepts vs. what motivates no-shows?*

The order of the motivators of respondents who submitted formal notification of the intent not to accept showed very minor shifts in ranking when compared to the informal no-shows. The no-show group recorded slightly higher motivation scores related to the encouragement of an academic. Again, a possible reason is that some respondents were undergraduate students during the application period, and after graduating, those applicants will have moved away from the influence of academic supervisors who may have encouraged the application.

The regression analysis model that calculated if a candidate would be a *no-show* rather than a *not accept* found no predictors of statistical significance. The lack of statistically significant differences in the two groups suggests that the people who do not show up as expected may discount the importance of submitting a formal notice, perhaps unaware of the problems they cause for the institution. This could highlight a lack of the right type of communication that could elicit this information from respondents in enough time to take mitigating action.

5.2 Reflection on the study

5.2.1 Conceptual framework

The conceptual framework that guided this piece of research was tri-partite involving interrelationships among the motivation element of the college choice process, demographics, and barriers that affect the transition from the initial application to the enrolment decision. First, I considered the variety of college choice models (Engel,

Kollat and Blackwell, 1968; Kotler, 1976; Chapman, 1986; Hossler and Gallagher, 1987). From these alternatives, I adopted the model developed by Hossler and Gallagher (1987) as a base for the postgraduate applicant decision-making process. That model with three stages of (1) formation of motivation, (2) selection of options, and (3) selection of preferred choice followed by enrolment provided a good starting point.

Second, I considered the various concepts of motivation, and oriented them in a different way to that I found in the literature. One way the literature describes motivation is as either intrinsic or extrinsic. Deci (1985) describes intrinsic motivation as the type of drive that originates from within a person, positing that an intrinsically-motivated person undertakes a task for the joy of doing it, with no prospect or even thought of a reward. Deci (ibid.) goes on to describe motivation driven by the prospect of a reward (or punishment), as extrinsic. Both intrinsic and extrinsic motivators factor in Maslow's five-level need hierarchy theory (1943) that suggests a structure in the way people fulfil needs. At the basic level, these needs are extrinsic and carry rewards of *food, water and shelter*, followed by *safety and security*. These extrinsic needs could be the result of a person's individual need or the need to provide for someone else. The higher levels suggest intrinsic needs of *belonging to a social group and having rewarding relationships with other people*, followed by *self-esteem*, and finally *self-actualisation*, at which pinnacle a person is striving to achieve life goals. Herzberg's (1959) theory also reflected extrinsic factors with '*dissatisfiers*' such as unpleasant working conditions, as well as '*satisfiers*' that gratify intrinsic needs. McClelland (1961) and Alderfer (1969) were similar in concept to Maslow's higher order needs, both suggesting theories with various categories of intrinsic needs that drive behaviour.

Motivation theories falling squarely in the extrinsic category include Becker's (1975; 1993) human capital theory that encourages employees to invest in education as a way to gain the reward of a better-paying career. Spence's (1973) signalling theory suggests extrinsic motivation and encourages people to upgrade skills because the effort of doing so would signal a more productive and valuable employee, possibly resulting in career advancement and higher pay. The MINDSPACE theory (Dolan et al., 2011)

suggests that both intrinsic and extrinsic factors influence decision-making, with people choosing to do things, not always for personal satisfaction, but because of emotion, subconscious cues, and commitments made to others.

Therefore, while all intrinsic motivators by definition relate to personal desires, extrinsic motivators could similarly emanate from a personal desire for a reward; for example, learning more about something, gaining better skills, or acquiring a certificate or new title. Extrinsic motivation could also originate from someone else via the instruction, advice or nudge of an employer, or person of significant influence, by the prospect of receiving an award, a new job, more money, or respect from an influential person. From these possibilities, I created groups representing motivation by type: intrinsic or extrinsic; and filtered extrinsic motivation by source: internally-driven or externally-driven. My groups were similar in concept to the more finely-grained Carré model (1998; 2001 cited by de Oliveira Pires p. 134-135) that suggests three subcategories of intrinsic motives (epistemic, socio-emotional, and hedonic), and seven subcategories of extrinsic motives (economic, derivative, professional operative, personal operative, identity, vocational, and prescriptive). The responses to the survey showed that the three-group model I adopted was a reasonable way to consider the motivation to apply.

Finally, I adapted the Cross (1981) model of situational, institutional and dispositional barriers to adult participation in learning, by extracting any concepts such as, a previous negative learning experience, that affected a person's self-esteem, as I felt these might occur *prior* to acting on the motivation to apply. The fact that my adapted model was only partially successful could be the result of both the small number of responses and the nature of the external environment.

5.2.2 The critical realist approach, methodology and methods

I used a critical realist approach to the research because that reflected my way of thinking about the transition between motivation to apply and enrolment. From the experience of many years of working in the postgraduate admissions and management

field, I believed that there was more to the decisions of accepted applicants not showing up without notification. After much consideration, I conceived the exploratory hypothesis of a relationship between the reason for someone not enrolling and the original reason for that person submitting an application for postgraduate study. In particular, that motivation from an external source could be an influential reason for an applicant taking the decision *not* to see the process through to enrolment, and citing a dispositional reason for not enrolling. The critical realist approach served me well, permitting me the flexibility to gather and analyse data in various ways, seeking a relationship, while appreciating that motivation is a construct that a researcher cannot observe or measure objectively and; therefore, is open to interpretation. Using this approach I could gather motivations and barriers, rated on a Likert-type scale by respondents, treat these data as quantifiable, assessable variables and subject the variables, along with demographic data, to quantitative analysis to investigate interrelationships.

The comments about motivations and barriers that some respondents provided freely showed that the addition of an initial qualitative phase to the data collection phase could have been useful in formulating a more-targeted list of motivation factors, perhaps bringing out some issues relevant to a small island state. Tashakkori and Teddlie opine that 'at some points the knower and the known must be interactive, while at others, one may more easily stand apart from what one is studying' (1998, p. 26). Including such an interactive, qualitative phase as part of an exploratory sequential mixed-methods approach (Creswell, 2014, p. 44), conducted *prior* to finalising the design of questionnaire may have confirmed the additional themes including *altruism*, *nation-building*, *peer pressure* and *self-help* that emerged from the comments. I could have accomplished this by hosting a focus group with enrolled postgraduate students, and while acknowledging that such an approach would require more resources and skill than a single approach (Cameron, 2009, p. 145), on reflection, I believe the potential contribution would have been invaluable. This was also evident

with the barriers, as some institutional factors emerged from the comments that I may have captured in more detail.

5.2.3 Strengths and limitations

Strengths of the research were: the overall access to postgraduate applicants during the application process; the ability to download data regularly through the application process; the understanding of the processes; the ability to use the student information system to extract, review, and clean data; and the ability to connect with people in all parts of the process. Because of this access, I could gather initial data on the pool of applicants as well as the final data on enrolment from the campus' postgraduate admissions database. Over a six-month period, respondents provided demographic, motivation and barrier data using an online survey instrument. Respondents could complete the survey in about five minutes using either a smartphone or computer. The data collection method provided a sufficient number of respondents for the analyses related to motivation, but the number of respondents in the barriers part of the survey fell below the minimum needed for some aspects of the analysis.

The study had a few limitations. These limitations related to the research design, the lack of clarity in how I wanted respondents to use the *Not Applicable* option of the Likert-type questions, and the decision to only ask about barriers after respondents made final enrolment decisions. While I reviewed many survey instruments capturing motivation, I did not take my questions directly from any particular prior survey because I found no questionnaires that addressed my particular research question. I also reviewed any instruments I found related to barriers to adult learning, and in the survey, I invited respondents to add additional motivators and barriers. However, after reviewing the comments respondents made in the various text sections, it was immediately obvious that adding an initial qualitative element to the research design would have strengthened the selection of both the motivation and barrier options on the questionnaire. The comments that respondents made showed there was room for

extra themes that may have generated sufficient interest in the larger body of respondents to create additional motivation factors.

While I successfully tested the reliability of the scales, some ways to improve future surveys became apparent once I started the analysis. For example, the way the respondent interpreted the two options *Not applicable* and *Neither agree nor disagree* in the Likert-type scales, required me to take a decision to merge these responses as evidence of no positive or negative effect. I may have avoided this by either excluding the *Not applicable* option or by providing clearer instructions about the use of that option.

One other area that I considered when reflecting was that I could have captured potential barriers from all respondents at the same time I gathered motivators, and ask respondents to confirm the barriers if they did not enrol. This way some of the aspects of the Cross (1981) model that had seemed less relevant at the initial stage of creating the conceptual framework may, in fact, have emerged as underlying insecurities. Barriers such as 'feeling too old', 'being discouraged by a previous negative situation as a student', may well have underpinned the no-show or not-enrol decision of respondents who initiated the application process because of the influence of external sources.

Finally, I had originally planned to have Skype interviews with all candidates who did not enrol, but adjusted that approach because of the issues surrounding the implementation of the change of tuition fee policy. While I still believe that I was correct to adjust the approach, the interviews may have been very useful as a way of reaching out to the people who did not enrol as many did not complete that part of the survey. The extra work would have extended the data collection and analysis phases further, but it may have improved the response rate in the section on barriers to enrolment, and provided better data for more robust regression analysis.

5.3 Summary

This chapter began with a detailed discussion about the findings in relation to the research questions and exploratory hypotheses, and compared the findings to prior research. The chapter continued with a reflection on the conceptual framework, the research paradigm, the methodology, the methods used in the study, outlined some strengths of the study and acknowledged some limitations.

In this chapter, I explained the four motivational themes of *personal development*, *professional development*, *upgrade marketability*, and *to meet expectations* that emerged from the exploratory factor analysis, and showed how these themes related to the factors found in prior research. The chapter outlined how these themes, along with demographics, either did or did not influence the various enrolment decisions. The chapter continued by outlining the results of the various regression analyses that sought correlations between motivation themes, demographics and barriers to enrolment. As well as the enrol/not enrol decision, I also addressed the three sub-questions that investigated the accept/not accept, enrol/no-show and not accept/no-show decisions.

The chapter then reflected on the framework, paradigm, methodology, and methods that guided the research. The first reflection confirmed the adoption of the Hossler and Gallagher (1987) model as a basis for examining the postgraduate applicant decision-making process. The reflection continued by summarising the theories I used to create three categories of motivation to apply according to type (intrinsic or extrinsic) and source (internally-driven or externally-driven), noting that responses to the survey confirmed these groupings as reasonable. The third part of the conceptual framework I used was the relationship of barriers to enrolment to the decision, and for this, I adapted the Cross (1981) model by removing barriers that may have affected people before they reached the stage of beginning the application process.

The study confirmed linkages between motivation and barriers, and between demographics and enrolment decisions; however, did not confirm a direct correlation

between motivation and the enrolment decision. The chapter noted the usefulness of the critical realist approach, the quantitative design that permitted exploratory factor and regression analyses to investigate the research questions. It also noted that including an exploratory sequential mixed-methods approach among existing postgraduate students may have confirmed motivation and barrier themes not found in the existing literature.

6. Conclusion

This final chapter begins by summarising the findings with respect to contribution to the literature. It continues by discussing the theoretical implications of the study for managerial practice, and by suggesting areas for future research. The chapter concludes with some final thoughts.

6.1 Contribution to the field

In addressing the research question '*What is the relationship between students' motivation to apply to postgraduate study, their demographic profile, and their decision to enrol in a postgraduate programme after receiving an offer of admission?*' the study found a number of associations between certain motivators and certain barriers. The study found that *professional development* motivators and *dispositional* barriers moved in opposite ways in that as an applicant's professional motives were stronger, the chance of a dispositional factor (such as a change of mind) forming a hindrance became weaker. In addition, the study found that *upgrade marketability* motivators and *external restraint* barriers were synchronised in that people motivated to enhance their job situation reported barriers outside of their control - such as a lack of support from an employer. Finally, the study also found a relationship between motives of meeting the expectations of other people and the incidence of financial matters negatively affecting the ability to enrol. However, the study did not find a direct relationship between any of the barrier themes and those applicants motivated by personal development goals.

Further, the study found both *age* and the number of *years since the last degree* as statistically significant in the enrolment decision, with the likelihood of enrolling *decreasing* with *increasing* age, and *increasing* with an *increasing* number of years since the award of the last degree. Another finding was that *region of nationality* was of statistical significance, with the likelihood of enrolling *decreasing* with *increasing* distance of the applicant's home region from the campus. Within the small number of research respondents, the study found that successful research applicants were

significantly *more* likely to enrol than taught master applicants. In terms of the three sub-questions, the study found: candidates who accepted places were most motivated by personal development goals followed by professional development goals; that this motivation profile was similar for candidates who did not enrol after receiving an offer of admission; and that there was no statistically significant difference in motivation or demographic profile between the candidates who rejected a place formally and those who rejected the place informally.

The college choice models, (Engel, Kollat and Blackwell, 1968; Kotler, 1976; Chapman, 1986; Hossler and Gallagher, 1987) are similar in the way they suggest a person goes about making a decision to enter higher education. The theories start with some type of motivating factor, continue with a varying number of steps where the search takes place, and end with enrolling or, in the case of Engel, an evaluation step after enrolling. These theories suggest that once a person acts on some motivation to apply, the decisions that follow relate to making choices between institutions based on information received, with the candidate making the best choice of all alternative institutions and programmes.

However, the theoretical implications of these findings suggest that motivation may not only be instrumental in the first stage of the college choice. This study suggests that if the type of motivation that influences the decision to apply is neither intrinsic nor extrinsic and driven by the applicant's own desire for reward, the applicant may not feel committed to the original decision. This lack of commitment can manifest at the end of the process with a successful applicant deciding not to enrol – either by rejecting the offer or by not showing up to enrol with a financial reason for the decision. This finding suggests a relationship between the initial motivation and the barrier that affects the enrolment decision. Other findings suggest that certain demographic elements affect the college choice decision-making models at the enrolment stage. Even after a person has applied, received an offer, and sometimes even accepted that offer, the candidate could decide not to enrol for reasons related to age, years since the last degree, and nationality.

The findings represent a contribution to the literature on postgraduate motivation, enrolment management, and decision-making. The findings could also be of use to postgraduate departments, bthe framework created herein, for determining the likelihood that applicants will follow the process through and enrol. Where candidates do enrol, the framework can help with assessing which applicants are more likely to accept and eventually enrol, which applicants are likely to become no-shows, which applicants may need assistance or more information, and which applicants may transition to students who may need intervention to be successful based on demographics as well as the initial motivational driver.

6.2 Implications of the findings for managerial practice

The research suggests candidates to be motivated first by personal development goals, then by professional development goals, and to be hampered by the one major barrier of finance. The study showed that on average, candidates to be less motivated by the need to meet expectations or upgrade job marketability, or to be affected by external restraint or dispositional-type issues. However, when the motivation to enrol was linked to the barriers to enrolment, the findings suggest that candidates feeling external pressure to apply, could go along with the enrolment idea up to the time they could quietly exit, either by formally refusing or by just not showing up, and to cite finance as a reason for not enrolling.

The implication of this for managerial practice is that postgraduate enrolment management researchers should be aware where a candidate cannot find an exit before enrolling, that candidate may end up enrolling albeit reluctantly. A reluctant student could experience problems transitioning into a successful student without the benefit of meaningful, supportive transition and retention strategies in place even before enrolment is over. With the effect of externally-driven extrinsic motivators, institutions may simply have to make allowances in the admission plans for the ones who are able to exit before enrolling. However, it may be useful to probe all applicants to understand both their reasons for applying and their concerns. This information

would help the institution determine what current and on-going interventions may help in all circumstances.

To address the legitimate financial barriers, institutions should work with financial organisations to make more creative, manageable, and timely arrangements available to applicants. Institutions may also consider requesting information on the application form about barriers that could prevent applicants from taking up the offer, so planning departments can devise strategies to assist a serious student in finding ways to continue through to enrolment.

Because some respondents reported the effect of external restraint barriers, institutions may need to review course schedules as well as delivery methods, and make a wider range of options available. Institutions might also provide information to employers about the programmes they offer, perhaps inviting selected employers to deliver specialist lectures to share real-world experience with students. This type of involvement with the academy may decrease the external restraint issues, by changing the way employers view the institution and may cause employers to realise the value of higher education to members of their own workforces.

The second set of findings suggests that certain demographic factors, that is: *age, years since the last qualification* and *nationality* could be influential in the enrolment decision. With the reality of the approaching semester, candidates returning to higher education after a long break may find the thought overwhelming once they consider the prospect of group projects, the need for IT and research skills, and a class comprised of a range of generations. Institutions need to be sensitive to possible concerns and provide regular communication with useful information, and perhaps host pre-enrolment academic and information sessions targeted to such issues during the long period between the opening of applications in November, and the start of the semester the following August/September. Findings also suggest that people *working part-time* and people *applying to part-time study* may be less likely to enrol, therefore

institutions need to consider these two additional areas and keep in touch with these candidates because they may have difficulty committing at enrolment time.

As applicants pointed out efficiency and information issues, institutions should regularly review all of the literature published, including web pages, to ensure all public information provides clear, correct and easily accessible information about fee structures, class schedules and residency requirements at all points of the application process. This would ensure that students understand these aspects in good enough time to make decisions and/or arrangements.

The application form could also ask more specific questions related to the potential problem areas, for example, to confirm that candidates have clear information on the fees for the programme, have a source of funding, need advice on practical options such as housing, and have seen a typical course schedule. Candidates driven by professional development motivators would not appear to be in need of intervention, but the implementation of these suggestions could redound to the benefit of all candidates and result in fewer candidates not enrolling.

The last set of findings is that respondents may simply not appreciate the implications of their lack of notification to the institution if they decide not to enrol. One suggestion to address this, is for the institution to establish regular, ongoing communication with the applicant beginning as soon as they submit an application and continuing until the registration is over. That communication could be as simple as sending a monthly information sheet outlining interesting scheduled campus events that applicants are eligible to attend, a list of support services that are available to applicants, and the name of a person an applicant can call or email if they have concerns, queries or even suggestions. This type of contact with the institution may change what appears to be an impersonal way the applicant views the institution, and thus encourage them to share their enrolment plans.

6.3 Areas for future study

This longitudinal study focused on one cohort at one campus of an institution. Future studies could involve the same research, but including a qualitative stage first to identify all motivation and barriers relevant to the specific context. Conducting the same study at each of the other campuses of the same institution, similarly situated in small island developing Caribbean states, could provide comparative data with which to test the framework and add to the knowledge base. Similar research in other small island states, developed and larger developing states would provide additional comparative data.

The selection of variables followed the protocol of the type of data normally collected from applicants by the campus, but a future study might gather additional data on the employment situation of respondents such as their level within the workplace (managerial, administrative), the type of industry in which they work, and the number of years in the current job. These data could provide additional insights. Another area for future study could be to follow the respondents who continued to enrol through their academic journey, to investigate whether there is a correlation of their motivation and demographic profile to retention and success.

6.4 Final thoughts

First as an information technology professional and then a Registrar, my career has been about making things work as efficiently and effectively as possible in accordance with existing rules, regulations and policies. This DBA has caused me to face and critically review many ingrained assumptions. This process has given me a depth of understanding, as well as a voice with which I feel better-equipped to contribute to fields related to postgraduate administration and management.

Having spent six years as a postgraduate Registrar, every year I found very troubling the high incidence of people accepting places offered but not showing up to start classes. From a practical point of view, no-shows create many challenges for

institutions consuming much time and effort of the administrative staff, and depending on the cost recovery level of the programme, may result in cancellation of an entire programme. This concern naturally grew when the number of no-shows increased after the implementation of Barbados tuition fee policy in 2013, and generated a feeling that there was more that we, as administrators, could and should be doing.

During the same six-year period, I often met with enrolled students who were experiencing challenges in their studies. In some cases, students are appreciative of a listening ear and, working together, we could come up with a plan that would enable or encourage them to continue. However, there were always candidates showing little interest in addressing challenges in any practical way, or who suggested their lack of progression as the fault of some other person or situation. This research has caused me to take a different view of some students' lack of interest in addressing challenges, to wonder if such disinterest is an outcome of starting postgraduate programmes because of imposition or a feeling of obligation, and to start devising enrolment and transition strategies based on my findings.

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Appendix I – Tuition fee policy

An extract from the 2013 Financial Statement and Budgetary Proposals presented to the House of Assembly of Barbados, by the Minister of Finance and Economic Affairs, on Tuesday, August 13, 2013

“The Government of Barbados recognizes that access to education at all levels has been a key factor in the success of Barbados as a society and an economy. The DLP [Democratic Labour Party] remains committed to, and fully supportive of, the continued growth and development of UWI [University of the West Indies] Cave Hill and increased access to tertiary education for Barbadians. In about 2003/2004 the Cave Hill Campus began a major expansion in terms of the numbers of students and the amenities offered. In 1999 for example, there were around 3,568 undergraduate students at the Cave Hill and by 2007 this number had increased to around 6,718 and currently stands at around 7,200 students. The expansion has meant major increases in the Government of Barbados’ contribution to UWI. For example, in 2007, the financial contribution of the Barbados government to UWI Cave Hill was \$79.3million dollars, a \$28.3 million over the \$51 million required in 1999. However, between 2007 and 2008 the annual contribution required from the Government of Barbados increased from \$79.3 million to \$120.5 million. To put things in context, for the entire period 1999 to 2007 combined, the total contribution required from the Government of Barbados to the Cave Hill Campus was \$543.2 million, compared to the \$636.3 million dollar contribution required for the 2008 to 2012 period. The reality is that the amount required in the last five years was \$93 million greater than the previous nine years combined.

The stark reality is that since around 2006 or so, the total contribution by the Government of Barbados to UWI has exceeded the combined contribution to all of our Nursery Schools, Primary Schools, Secondary schools, Barbados Community College and the Samuel Jackman Prescod Polytechnic. While remaining committed to providing continued access to university education, the government cannot continue to preside over a situation where the growth and development of the non-university component education system is severely retarded. The country needs to be able to build capacity at all levels.

As a consequence, the government has decided that in an effort to assist it in meeting the exploding costs of university education it has now become necessary to ask students attending and desirous of attending the University of the West Indies to contribute to their education in a more direct manner.

Therefore effective 2014 Barbadian citizens pursuing studies at campuses of the UWI will be required to pay tuition fees from academic year 2014/2015, while the government will continue to fund economic costs.”

Appendix II – Survey questionnaires

Motivation for postgraduate application and factors that affect enrolment

A. INTRODUCTION

Survey of Postgraduate Applicants

Dear Postgraduate Applicant

I am a doctoral candidate at the University of Bath, U.K. undertaking research into postgraduate motivations and factors that affect enrolment after acceptance to a postgraduate programme. As a successful applicant to a Cave Hill postgraduate programme, I would be grateful if you would agree to participate in my study.

My employer, The University of the West Indies, Cave Hill Campus, Barbados has agreed to assist me in this research by permitting me to contact you. Your participation, which is totally voluntary, will involve completion of this survey and the option to take one brief follow-up survey depending on the enrolment decision you make related to the offer that has recently been extended to you.

Individual responses will be kept strictly confidential and any comments which you make will be reported anonymously. In addition, none of your responses will affect any University decision about your academic career now or in the future. I estimate that the questionnaire will take a maximum of 10 minutes to complete. Selecting 'Yes' below will signify your agreement to contribute to this project and for your data to be used.

If you require any additional information or have any concerns, please contact me at G.E.Carter-Payne@bath.ac.uk, my supervisor, Dr. Robin Shields, University of Bath at R.A.Shields@bath.ac.uk or the Cave Hill Institutional Review Board at ResearchEthics@cavehill.uwi.edu.

Thank you in advance for your participation.

Yours sincerely,

Gail Carter-Payne

Doctor of Business Administration student University of Bath

and

Senior Assistant Registrar (Planning) The University of the West Indies Cave Hill Campus

CLICK 'YES' BELOW TO START, OR 'NO' TO EXIT

- ☐ Yes, I agree to participate in this study (1)
- ☐ No, I do not agree to participate in this study (2)

B. PROGRAMME

Thank you for agreeing to participate in this survey of postgraduate applicants. Your responses will help researchers to better understand the motivations for applying to postgraduate study and the factors that ultimately affect a successful applicant's decision to enrol.

Q1. For which type of degree programme at the Cave Hill Campus have you received this offer?

- ☐ Postgraduate Diploma (1)
- ☐ Taught Masters degree (e.g. MA, MED, MBA, MPH, MSW, MSC) (2)
- ☐ Master of Philosophy (MPhil) (3)
- ☐ Specialist Doctor of Medicine (DM) (4)
- ☐ Doctor of Business Administration (DBA) (5)
- ☐ Doctor of Philosophy (PhD) (6)

Q2. What is the subject area(s) of the Cave Hill postgraduate programme for which you have been accepted (e.g. Education, General Surgery, Business Analytics)?

Q3. How did you apply to enrol in this postgraduate programme?

- Full-time (1)
- Part-time (2)

C. MOTIVATION TO APPLY

Q4. This question lists 20 potential motivators that *may* have encouraged you to **apply** to this particular postgraduate programme. Please rate your agreement with each from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Please select 6 (*N/A*) if the particular motivator does not apply.

	1. Strongly disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. Strongly agree	6. N/A
The encouragement of a former academic tutor/supervisor (1)						
The advice of my employer (2)						
To prove to myself I am capable of postgraduate study (3)						
To prove to others that I am capable of postgraduate study (4)						
It felt like a natural step for me (5)						
I enjoyed my previous higher education studies and want to continue studying (6)						
To be recognised in and contribute to my field (7)						
To set an example for my children (8)						
There was funding available (9)						
To change my career (10)						
To expand my knowledge of a chosen subject (11)						
To develop particular skills (12)						

To enhance my earning power (13)

To enable me to progress to a further higher degree (e.g. PhD) (14)

There were no suitable jobs when I graduated from my last degree (15)

To delay entry into the labour market (16)

To gain practical experience (17)

To enter a profession which needs or favours this qualification (18)

To progress in my career (19)

To access professional networking opportunities (20)

Q4 b. If any reason(s) for applying to this postgraduate programme was (were) not listed above please enter it (them) the space below and indicate the extent to which you agree each reason motivated you to apply.

	1. Strongly disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. Strongly agree
Enter additional reason 1					
Enter additional reason 2					
Enter additional reason 3					

D. ENROLMENT DECISION

Q5. Have you accepted the offer of the place?

- ☐ Yes, I have accepted the offer. (1)
- ☐ No, I have rejected the offer. (2) [SKIP TO QUESTION 6]
- ☐ I have not yet responded to the offer. (3)

Q6. What is the likelihood that you will register in this programme in Semester 1, 2018-2019?

- ☐ Extremely likely (1)
- ☐ Somewhat likely (2)
- ☐ Neither likely nor unlikely (3)
- ☐ Somewhat unlikely (4)
- ☐ Extremely unlikely (5)

Q6. This question lists 13 potential factors that *may* have influenced your decision to reject the offer of a place in this postgraduate programme. Please rate your agreement with each potential factor from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Please select 6 (N/A) if the particular factor does not apply.

	1. Strongly disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. Strongly agree	6. N/A
There are difficulties fitting the course schedule around my current work or family commitments. (1)						
I could not gather sufficient funding in time (2)						
I have concerns about having to incur debt in order to finance this programme (3)						
I changed my mind about wanting to do a postgraduate programme (4)						
I was discouraged because my employer is not supportive of my plans to undertake this programme. (5)						
I was discouraged because my spouse/partner/family is not supportive of my plans to undertake this programme. (6)						
I do not have sufficient confidence in my ability to be successful in the programme (7)						
I have concerns about committing the number of years to study (8)						
I was put off Cave Hill by a negative experience (9)						
I was accepted to a preferred institution (10)						
I was accepted to a different programme at Cave Hill (11)						
My situation has changed and I no longer have to do this programme (12)						
My situation has changed and I am no longer able to undertake postgraduate study. (13)						

Q6 b. If any factor(s) for rejecting the offer was (were) not listed above please enter it (them) in the space below and indicate the extent to which you agree that each factor influenced your decision.

	1. Strongly disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. Strongly agree
Enter additional factor 1 _____					
Enter additional factor 2 _____					
Enter additional factor 3 _____					

E. ABOUT YOU

Q 7. What is your current employment status?

- Working full time (as an employee or self-employed) (1)
- Working part time (as an employee or self-employed) (2)
- Not currently employed, seeking employment (3)
- Not currently employed, not seeking employment (4)
- Retired (5)
- Other (please specify): (6) _____

Q8. Which of the following have you already completed so far? (Please select all that apply)

- ☐ Secondary education (high school) (1)
- ☐ Undergraduate degree (2)
- ☐ Postgraduate degree (3)

Q8 b. In which year did you complete your last degree programme?

▼ 1968 (1) ... 2018 (46)

Q9. Are you currently in an undergraduate or postgraduate degree programme?

- Yes, I am currently in an undergraduate programme (1)
- Yes, I am currently in a postgraduate programme (2)
- No, I am not currently in either an undergraduate or postgraduate programme (3)

Q10. What is your gender?

- Male (1)
- Female (2)
- Not listed (please specify) (3) _____
- Prefer not to state (4)

Q11. In which year were you born?

▼ 1950 (1) ... 1997 (43)

Q12. What is your country of nationality?

▼ Afghanistan (1) ... Zimbabwe (1357)

Q13. As stated before, all responses to this survey will be reported anonymously. I would like to follow up with some respondents depending on their final enrolment/registration status. Those answers will also be reported anonymously.

May I contact you again in August / September for a brief follow-up question about your registration status?

- Yes. You may contact me by email at: (1) _____
- No (2)

Please feel free to comment further on any aspect of your motivation for postgraduate study.

Thank you for your time.

Appendix III – Email messages accompanying surveys

A. Original questionnaire

Dear Cave Hill Postgraduate Applicant

I hope this finds you well.

I am a member of the senior administrative staff at the Cave Hill Campus undertaking research into postgraduate enrolment as part of a doctoral programme at the University of Bath, UK. My study investigates motivation for applying to postgraduate degree programmes and factors that affect a student's decision to enrol after acceptance. The results will provide a scholarly understanding of the drivers for undertaking this level of study as well as the enablers and barriers that affect applicants.

As you are an applicant who has recently been made an offer to a postgraduate programme at the Cave Hill Campus, The University of the West Indies I am hoping that you will agree to provide me with some insight in this area by completing a short survey. Please note that this research has the approval of the Cave Hill Campus Research Ethics Committee as well as the support of the Cave Hill Campus Registrar who has given me permission to contact you at the email address you used with your recent application.

If you are willing to participate please be assured that all responses will be reported anonymously, used only for the purpose of this research, and will not affect this or any future application to, or interaction with, the UWI in any way. In addition, your contact information will not be shared or reported in any way.

Participation is completely voluntary so if you would rather not take part please use the link at the bottom of this email and your email address will be removed and you will not be contacted further.

If you *are* willing to participate, more information and the route for concerns or queries about this research are presented in the Introduction section of the survey which should take no more than 10 minutes of your time.

The survey can be accessed via the link below:

[Take the Survey](#)

Or if you prefer you may copy and paste the URL below into your internet browser:

Survey URL...

Thank you in anticipation of your time and input.

Gail Carter-Payne

Senior Assistant Registrar (Planning), Cave Hill Campus, UWI

and

DBA student, University of Bath, UK

Follow the link to opt-out of future emails:

[Click here to unsubscribe](#)

B. Reminder

Dear [Candidate's first name]

I hope you don't mind receiving this gentle reminder.

I am still hoping that you will agree to give me 10 minutes of your time to help my research into postgraduate motivations and factors that affect enrolment. From my previous role as Registrar for Graduate Studies and Research at Cave Hill, I could provide a great deal of anecdotal information about the situations that postgraduate students encounter which (I believe) influence their decision-making.

However, academic studies such as this are necessary as they underpin the analysis of the enablers and barriers to undertaking higher degrees, and provide the evidence that needed to support changes in policy and practice.

If you are willing to participate, the survey is available at this link:

Survey link...

Or copy and paste the URL below into your internet browser:

Survey URL...

Thank you again and I wish you a pleasant day.

C. Previously accepted but subsequently sent refusals

Dear [Candidate's first name]

I hope this email finds you well.

A few months ago, you very kindly completed a survey related to an offer of a place in a postgraduate programme at the Cave Hill Campus of The University of the West Indies. At that time, you agreed that I could have a brief follow-up session with you about your final enrolment status. I am contacting you now because you did not enrol as expected and a significant part of this study involves capturing reasons for non-enrollment.

I estimate that this second questionnaire will take just 2 - 3 minutes to complete. Clicking on the link below will signify your agreement to continue contributing to this project and for your data to be used.

Please follow this link to take the follow-up survey:

Survey Link...

Or copy and paste the URL below into your internet browser:

Survey URL...

Thank you again and best regards.

D. Previously undecided, subsequent refusal

Dear [Candidate's first name]

I hope this email finds you well.

A few months ago, you very kindly completed a survey related to an offer of a place in a postgraduate programme at the Cave Hill Campus of The University of the West Indies. At that time, you agreed that I could have a brief follow-up session with you about your final enrolment status. I am contacting you now because you did not accept the offer extended and a significant part of this study involves capturing reasons for non-enrollment.

I estimate that this second questionnaire will take just 2 - 3 minutes to complete. Clicking on the link below will signify your agreement to continue contributing to this project and for your data to be used.

Please follow this link to take the follow-up survey:

Survey Link ...

Or copy and paste the URL below into your internet browser:

Survey URL...

Thank you again and best regards.

...

E. Not yet responded

Dear [Candidate's first name]

I hope this finds you well and that you don't mind me reaching out to you one final time.

Since April of this year, I have been collecting data from all successful applicants to postgraduate programmes at the Cave Hill Campus as part of my academic interest in postgraduate motivation and factors that affect enrollment.

Some weeks ago, I sent the questionnaire link to you but imagine that you were still undecided at that time. However, the semester has started and as you have not taken up the offer I would be extremely grateful if you would give me just 10 minutes of your time now to reflect on both your original motivation to apply as well as the factors that affected your decision on the offer. In addition to the academic findings, this research has the capacity to provide summary evidence for changes in policy and practice if there are factors which are institutional or situational in nature.

If you are willing to participate, the survey is available at this link:

Survey Link...

Or copy and paste the URL below into your internet browser:

Survey URL...

Of course, if you are not willing to participate you are free to either opt-out, or just close this message.

Thank you again and I wish you all the best.

...

Appendix IV – Approvals

A. Approval from Campus Registrar to access data



THE UNIVERSITY OF THE WEST INDIES

CAVE HILL CAMPUS, P. O. BOX 64, BRIDGETOWN, BARBADOS

IN REPLY PLEASE QUOTE
OUR REFERENCE: 139-6-4

TELEPHONE: (246) 417-4040
FAX : (246) 417-4044

Office of the Campus Registrar


MEMORANDUM

TO: SAR, Planning
FROM: Campus Registrar (Ag)
DATE: March 23, 2018
SUBJECT: Approval to Access Data

I refer to your request for approval to access data in relation to applicants to UWI postgraduate degrees.

The University approves your request and is supportive of this research.

As is customary in these matters, we will require you to complete the attached UWI confidentiality agreement.


.....
Rommel Carter (Mr.)

B. Approval from IRB, Cave Hill Campus



In reply please quote
our reference

THE UNIVERSITY OF THE WEST INDIES

FACULTY OF MEDICAL SCIENCES

Formerly The School of Clinical Medicine and Research

Cave Hill Campus and Queen Elizabeth Hospital
Bridgetown, Barbados

Pre-Clinical, Cave Hill Campus:
Tel: (246) 417-4000/4694/4703 Fax: (246) 438-9170
Clinical, Queen Elizabeth Hospital:
Tel: (246) 429-5112 or 437-8335 Fax: (246) 429-6738
PBX: (246) 436-6450 Ext: 6229/6239

March 14, 2018

Ms. Gail Carter-Payne
26 Warrens Crescent
St. Thomas

Dear Ms. Carter-Payne

Re: 180206-A: Motivation to apply for and enrol in postgraduate degrees: a study at the University of the West Indies

I write on behalf of the University of the West Indies-Cave Hill/Barbados Ministry of Health Research Ethics Committee/Institutional Review Board to convey **approval** of your study.

- We usually require a local supervisor when primary supervisors are overseas. This requirement is designed to make sure that local accountability is in place for remotely supervised research. We recognize that your professional position provides accountability. However, to be consistent, we ask that you identify a suitable person for local supervision. Members suggested that you make contact Ian Marshall could potentially serve in this role.
- Please also clarify that the 200 persons identified in your sampling design is the expected amount of participants and not a number determined by sample size calculation.
- Please include contact information for the IRB in your initial correspondence with participants.

This approval is for one year from the date of this correspondence.

Please remember that you must also secure approval from any individual site or organization, *i.e.*, the relevant ministry, agency, or company, if this is required. Please furnish a copy of this approval.

If you have not already done so, please forward your certificate of completion for ethics training at www.citiprogram.org to kristina.bryant@cavehill.uwi.edu.

All research data and forms must be kept for no less than five years after completion of the approved project. The standard process for data security is data encryption. When your research is complete (even if earlier than the approval period ends), please notify the Board in writing to officially close your protocol.

If you anticipate the duration of data collection to exceed one year, please send a letter to the Board at least one month prior to the expiration date. You should indicate why you want the research to remain open (*e.g.*, additional accrual necessary for more robust results, funding from an outside source to continue). Continuation is contingent on Board approval.

Please remember that any changes to the protocol will require the submission of a revised protocol via a complete application to the IRB before implementation of the revision.

You must report any unanticipated adverse event experienced by a research subject within five days to the Chair of the IRB through this letterhead address or via e-mail
kristina.bryant@cavchill.uwi.edu.

The Committee wishes you the best of luck in your research endeavors. Please feel free to contact us at any time should you have questions or concerns. I remain,

Yours sincerely,

A handwritten signature in black ink, appearing to read "Mike H. Campbell".

Dr. Mike Campbell, Chair

CC:

Dr. Thea Scantlebury-Manning, Deputy Chair
Graduate Studies
Ms. Kristina Bryant, Office of Research
IRB File

Appendix V – Supporting tables

A. Monte Carlo tables

Motivations

11/14/2018 11:37:43 AM Number of variables: 20

Number of subjects: 198

Number of replications: 100

```
+++++
Eigenvalue #   Random Eigenvalue   Standard Dev
+++++
01      1.6157      .0647
02      1.4916      .0481
03      1.4127      .0436
04      1.3359      .0346
05      1.2658      .0343
06      1.2071      .0307
07      1.1502      .0297
08      1.0932      .0250
09      1.0460      .0252
10      0.9950      .0223
11      0.9458      .0237
12      0.8999      .0277
13      0.8518      .0262
14      0.8073      .0232
15      0.7648      .0258
16      0.7176      .0247
17      0.6756      .0250
18      0.6266      .0255
19      0.5783      .0313
20      0.5191      .0364
+++++
11/14/2018 11:37:49 AM
```

Barriers to Enrolment

Monte Carlo PCA for Parallel Analysis

11/21/2018 4:02:51 PM

Number of variables: 13

Number of subjects: 50

Number of replications: 50

```
+++++
Eigenvalue # Random Eigenvalue Standard Dev
+++++
1      1.9938      .1435
2      1.6869      .1146
3      1.4903      .0741
4      1.3163      .0796
5      1.1904      .0700
6      1.0487      .0509
7      0.9224      .0603
8      0.8089      .0669
9      0.7020      .0594
10     0.6108      .0435
11     0.5060      .0537
12     0.4119      .0492
13     0.3115      .0491
+++++
```

11/21/2018 4:02:52 PM

Monte Carlo PCA for Parallel Analysis

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B. Binary Regression Analysis - Classification tables

Not Accept/Accept vs. Motivators

		Initial Prediction ability Predicted			Prediction ability <i>after</i> application of model Predicted		
		Final Decision on Accepting		Percentage	Final Decision on Accepting		Percentage
Observed		<i>Did not Accept</i>	<i>Accepted</i>	Correct	<i>Did not Accept</i>	<i>Accepted</i>	Correct
Final Decision on Accepting	Did not Accept	0	37	.0	3	34	8.1
	Accepted	0	141	100.0	4	137	97.2
Overall Percentage				79.2			78.7

Not Accept/No-Show vs. Motivators

		Initial Prediction ability Predicted			Prediction ability <i>after</i> application of model Predicted		
		Formal Notification of Rejection		Percentage	Formal Notification of Rejection		Percentage
Observed		<i>Did not Accept</i>	<i>No-Show</i>	Correct	<i>Did not Accept</i>	<i>No Show</i>	Correct
Formal Notification of rejection	Did not Accept	0	37	.0	20	17	54.1
	No-Show	0	46	100.0	11	35	76.1
Overall Percentage				55.4			66.3

Not Enrol/Enrol vs. Motivators

		Initial Prediction ability Predicted			Prediction ability <i>after</i> application of model Predicted		
		Final Decision on Enrolling		Percentage	Final Decision on Enrolling		Percentage
Observed		<i>Did not Enrol</i>	<i>Enrolled</i>	Correct	<i>Did not Enrol</i>	<i>Enrolled</i>	Correct
Final Decision on Enrolling	Did not Enrol	0	83	.0	55	28	66.3
	Enrolled	0	95	100.0	21	74	77.9
Overall Percentage				53.4			72.5

Enrol/No-Show vs. Motivators

		Initial Prediction ability Predicted			Prediction ability <i>after</i> application of model Predicted		
		Final Decision on Showing Up		Percentage	Final Decision on Showing Up		Percentage
Observed		<i>Showed Up</i>	<i>No Show</i>	Correct	<i>Showed Up</i>	<i>No Show</i>	Correct
Final Decision on Showing up	Showed up	95	0	100.0	83	12	87.4
	No-Show	46	0	0	6	20	43.5
Overall Percentage				67.4			73.0

Not Accept/No-Show vs. Barriers

		Initial Prediction ability Predicted			Prediction ability <i>after</i> application of model Predicted		
		Formal Notification of rejection		Percentage	Formal Notification of rejection		Percentage
Observed		<i>Did not Accept</i>	<i>No-Show</i>	Correct	<i>Did not Accept</i>	<i>No-Show</i>	Correct
Formal Notification of rejection	Did not Accept	0	17	.0	10	7	58.8
	No-Show	0	28	100.0	6	22	78.6
Overall Percentage				62.2			71.1

Appendix VI – Responses to free-form questions

A. Additional comments regarding Motivation to Apply

Item
<i>I. Contribute to National Quality of Life & Development</i>
To make significant contribution to national development
To assist my country when dealing with individuals with mental illness
To help combat Gender inequality, gender, bias, Gender abuse etc
To make a greater contribution to my Country
For the betterment of my country
To help my country and [my continent] as a whole to improve in legislative drafting because we have very few drafters and therefore we end up with laws not so well drafted.
To motivate other colleagues as well
I want to improve the quality of life of my country's population so am taking steps to do so
To improve the structure and development of educational and training preceptor-ship programs for nursing students
To standardize the nursing profession
In [my country] the issue of mental health is greatly ignored. Individuals who display maladaptive behaviors are either put into prison or are being locked away without assessment. My being able to complete this program would cause me to be fully equipped to contribute positively to my country.
It will enable me to acquire the knowledge in order to know what to say and when it comes fighting against injustice in a military organization. In my place of employment, women are the minority and here we face what you call structural violence. Getting this degree will be important, because it will allow me to better deal with the issue from a professional standing point.
I love drafting and would wish to advance, better and expand my knowledge on the same. It I would also be enable me pass the knowledge to others through teachings in colleges, institutions and other sectors, people or group directly or in directly linked to this area.
I believe that effective leadership of educational institutions in [my country] is lacking and I hope through my pursuit of a Post a Graduate degree I can contribute to improved leadership of the aforementioned institution
I have a strong desire to contribute towards the regional integration project. Something that was instilled in me through my lecturers in my undergraduate studies. For this reason I believe a postgraduate study in my chosen programme was necessary to gain the knowledge and experience required. Also, as was mentioned in your survey, to prove to myself that it can be done.
I want to change our education system...it is too harsh and focused on the hard skills. Yet it is the soft skills that make us successful in life....in my humble opinion.

Need to be teacher trained to continue my interest in the education system.
Another motivation that is not directly captured in this survey is the strong need to contribute in a more direct and meaningful way to national discourse in the particular field.
<i>2. To follow passion</i>
To self-Actualize
To follow my passion
To follow my passion for teaching
Contribute to research
A personal goal
I feel like academia is my purpose on this earth
For me personally, my main motivation is to complete one of my long term goals. This is what drives me and keeps me determined.
<i>3. Direct or Indirect Pressure or Influence from others</i>
Parents & siblings have master's degrees
Peer Pressure (2)
Encouragement from friends & family
Inspiration from friends
<i>4. To improve / broaden job opportunities</i>
To eventually pursue my own business
Too many persons have 1st Degrees and there aren't enough jobs catering to that
To migrate to favourable job market
Limited choice of masters in required field
After gaining a BSc in Mgmt was told am not qualified for position that I have acted in many times
To satisfy job qualification requirements
To be recognised as a consultant in a specialty
To allow me to qualify for higher Consultancies; Will also be the first in my family
My main motivation for this study is to enhance my current qualifications and become an expert in my career path
This certificate will enhance my possibility for international jobs
Academic adviser almost guarantees that I should get a job afterwards.
My aim is to become a pioneer in the advancement of Mathematics at the secondary school level where position above a teacher requires the presence of a master's. I am therefore attempting to place myself in a position such that if the opportunity occurs i am ready.
Working at an International Organization in Conservation and Sustainability, working with internationals and local students and trying to increase my

knowledge in said subject area motivated me to apply for my graduate study. Setting an example for students in STEM and showing my country that if one person can do it and excel then others will be willing to try.
I was on my way to become an Attorney. Midway through my LLB I realized I didn't want to law because of how monotonous it was. However, I decided to finish as opposed to stopping. I decided to do the Masters in International Trade Policy for several reasons: 1) It is related to my Undergraduate degree 2) It will increase my earning capacity 3) It is not as competitive as Law (too many Lawyers) 4) it involves Travelling. Hope this helps.
To obtain more knowledge and insight to further enhance my chosen career.
Always wanted to pursue a postgraduate study within the field of business and finance. In addition, I wanted to find a program in an area to complement my previous studies and skill sets gained. Allowing for me to contribute more to wider business.
It was not simple to answer the question about funding being a motivator. The fact that the masters in nursing Administration is going to take place is a great motivator; the institution to which I am committed would benefit especially if they can have a larger compliment of nursing educators at the medical facilities to the ratio of those in the nursing school. The onus of education need be changed from the regular RN to Nurse educators who are usually more obligated to share knowledge.
To gain more training and confidence in my field of expertise
<i>5. Self-help</i>
Health
To avoid depression
Stress/Frustration
To Expand Skills
Full scholarships available in the Caribbean
Going to study provides the opportunity to get a break from my job
Wanted a new and better life
For greater satisfaction in my job
To build self-confidence in the career
To become more marketable
Earning power
To understand individual's behaviors after being faced with certain issues.
To understand the way people think.
It is hoped that the knowledge gained would help me to assist in current challenges being faced at work.
I want to give my best and when I am fully trained, I will do just that.
Being divorced and living as a single mother of one forced another take on

how I should live my life and I wanted to strengthen and improve my individual happiness and wellbeing as a woman and single mother.
<i>6. Additional comments</i>
UWI does not discriminate with respect to race, gender or ethnic group
World renowned lecturers and professors
Gotten through a Master's Program at a top ranking university In North America. Was however very nervous about the visa process so Cavehill was my plan B in case my first choice did not fall through
I wanted to finish what I started
I felt the need to complete all my studies in one go in the event of not being motivated to do so once I enter the labour force.

B. Additional comments regarding Barriers to Enrolment

<i>Situational Issues</i>
I am married and I needed to do something different to further my education since the degree that I really wanted to do wasn't being offered and was way too expensive for me to do.
I was accepted to read for my Legal Education Certificate
I will be moving to a new country to study
I was delayed from signing out at my place of work, But i will come in January and join semester II
Illness
The course had started
The only factor that would render me unable to pursue postgraduate study would be unavailability of funds
<i>Dispositional Issues</i>
Just completed my Bachelor Degree wasn't prepared mentally to study again
I had completed my degree at the University last year. Even though I wanted to start this academic year don't think I was fully prepared. Hence my application was deferred to September, 2019
<i>Institutional Issues</i>
Did not receive financial break down, student ID number etc
I was told that my offer later will be sent but up till now I have not received it yet, so I wish something be done.
I was told to defer and did so
My acceptance letter came late
Registration for housing on campus needs to be later
Teaching method not blended
The course I am interested in is not currently available at Cave Hill
The program required me to be in Barbados all week and was not as flexible as I initially understood
The program timetable for classes was more days than was initially indicated on the campus website
The programme in which I have enrolled is currently not on the list for National Development programmes. It is my hope that this list will be revised to include my programme to further aid with students such as myself that are unable to meet the financial obligations of pursuing a MSc.
Thought the class was distance learning